PRIMITIVE PEOPLES OF MATTO GROSSO BRAZIL

000

V. M. PETRULLO

THE MUSEUM JOURNAL
VOLUME XXIII — NUMBER 2

PUBLISHED BY THE UNIVERSITY MUSEUM
PHILADELPHIA

[P. 81]

050

COPYRIGHT [illegible]
BY THE UNIVERSITY MUSEUM

[P. 82]

000

CONTENTS

PRIMITIVE PEOPLES OF MATTO GROSSO
By V. M. Petrullo . . . . PAGE 91

The Museum Journal is indexed in The Art Index

[P. 83]

DESCRIPTION OF PLATES

The italic number under each plate number indicates the page on which that plate will be found.

000

PLATE

I (*Frontispiece*) Tsuva girl.

II 1. View of the port of Corumbá. In the foreground is shown
97 the type of boats that are used on the upper Paraguay, for freight and passenger service.
2. The Paraguay river at Descavaldos, at the end of the rainy season.

III 1. Air view of the flooded pantanal between the Paraguay and
99 the São Lorenço rivers, near the end of the rainy season.
2. The jaguar dance of the Bororo da Campanha at Laguna, Descavaldos. The impersonator of the jaguar is in the middle background.
3. Front view of the impersonator of the jaguar with the costume worn in the dance. Note the woman's hair mask falling over his face, the down pasted on his body, the painting and the decoration on the inner surface of the jaguar robe.
4. Back view of the same costume. Note the snake skins.

IV 1. Air view of the upper Paraguayan valley, showing the
102 chapadão rising abruptly from it. Looking north.
2. Bororo of São Lorenço shooting fish with bow and arrow. Note the Bororo dugout canoe in the left foreground.

V 1. São Lorenço Bororo with fish that he shot. Note the dec-
105 orated bow, extent of depilidation, and the shaving of the temples.
2. São Lorenço Bororo drawing the bow. Note the penis envelope.

VI 1. São Lorenço Bororo with facial painting.
108 2. São Lorenço Bororo girl with facial painting, wrist bands, and pendant of the claws of the giant armadillo.

VII 1. São Lorenço Bororo girl with facial painting and pendant of
111 jaguar teeth.
2. São Lorenço Bororo wearing a flower as labret, inserted in a hole in the lip.

PLATE

VIII *114*
1. Air view of Descavaldos. I marks the location of the area excavated in Cemetery I, and II the location of Cemetery II. ODD
2. General view of a section of Cemetery II. Note the sizes, shapes and positions of the urns, and the burial group at the right, showing the skeletons packed closely around a pot. The shells in the foreground represent a small portion of the quantity found at all levels in the soil.

IX *123*
1. General view of a section of Cemetery I before the bowls were removed.
2. A burial (Unit F) after the protecting pottery bowls were removed. Note the size and position of the legs, and the perforated teeth over the neck.
3. Yawalapiti and Mehinaku encamped with our party at the mouth of the Kuluene river. The lower hammock is occupied by the Yawalapiti wife of the Mehinaku occupying the upper one. They are eating biiju.
4. Arrival of our party at the port of the Kuikutl on the Kuluene river.

X *126*
1. Yawalapiti village. In the middle distance is the harpy eagle house; next to it is the men's house; and beyond and to the right, the ordinary houses. In front of the men's house is the log on which guests are asked to sit when first arriving at the village.
2. Half-finished house of the Naravute, showing the skeleton framework, the false and true roofs, and the superstructure.
3. Detail of the skeleton framework of the roof of the house shown in Figure 2.
4. Close-up of the completed house.

XI *135*
1. Mehinaku men and boys. The man second from the right is the one who came to the rescue of the party after the loss of the three canoes while descending the Kuluene. Note the size of the bow and arrows, depilidation of the genital parts, and gee string.
2. Three Tsuva women carrying loads on the head. The figure at the left is carrying biiju in a splint mat; the women in the middle, a calabash with farina; the one on the right, biiju and other objects wrapped in her hammock. Note the 'uluri' and the way of wearing it; also the depilidation of the vulva.
3. Kuikutl women. Note uluri and the method of carrying the young.

000

PLATE

4. Kalapalu men, with bows and arrows and paddles. The man at the left is carrying a load with a tumpline across the upper part of his breast.

XII *148*
1. Yawalapiti woman pounding manioc in a wooden mortar with a wooden pestle. Note the carrying baskets packed with with farina 'maça' or loaves, for storage; also the platform on which are drying these loaves, and pottery in the background.
2. Yawalapiti women preparing manioc farina. At the right one woman is grating manioc, and at the left the moist mass is being squeezed in a splint mat. Note the pottery.
3. Naravute making biiju. The woman to the right is sifting farina with a splint mat into a pottery vessel. The figure on the left, with tightly bound legs and hair covering her face, is cooking the biiju; she is passing through the puberty initiation period. The pottery biiju pan rests on the rocks, and in the left foreground is the biiju spatula.
4. Yawalapiti polygenous family, consisting of the man, his two wives, both holding children, and his children. Note the method of carrying the young, the shaven heads of the two boys at the right, and the crane-like posture of one.

XIII *152*
1. Mehinaku spearing fish in Yawalapiti waters. Note the length of the spear and the open bow of the canoe. The man's wife, seated in the canoe immediately behind him, is a Yawalapiti.
2. Kalapalu shooting fish with bow and arrow, the most common way of getting fish. The shape of the bark canoes used in the region is clearly shown.
3. Kalapalu man.
4. Profile of Kalapalu man in Figure 3.

XIV *154*
1. Anahukua woman, married to a Kalapalu.
2. Profile of Anahukua woman in Figure 1.
3. Yawalapiti girls. Note the absence of the triangular uluri in the younger, who is merely wearing a string around the loins.
4. Profile of the older girl seen in Figure 3.

XV *158*
1. Tsuva woman.
2. Profile.
3. Tsuva man.
4. Profile.

XVI *162*
1. Kuikutl man.
2. Profile.

PLATE

3. Naravute woman.
4. Profile.

XVII *166*
1. Naravute woman wearing necklace which we presented to her.
2. Profile.
3. Naravute headman, husband of woman in Figures 1 and 2.
4. Profile.

XVIII *170*
1. Naravute woman.
2. Profile.
3. Naravute man.
4. Profile.

XIX *174*
1. Broken, polished, thin celt of limy chert.
2. Polished, grooved celt from Cemetery I.
3. Polished hornfel object from a mound at Agua Verde.
4. Inner surface of Bororo da Campanha jaguar robe is used in the dance described in the text. The painted designs are in blue (heavy lines) and red (lighter lines and hatching).
5. Pot decorated with impressed string pattern; from Cemetery I, Unit G.
6-8. Flutes and pan pipes of the Kuluseu-Kuluene region.
9-11. Shell necklaces of the Kuluseu-Kuluene region: Perforated discs like Figure 10 were found associated with the burials of Cemetery I.

XX *175*
1-4. Potsherds with painted decoration, from Cemetery II.
5. Quartz pendant from Cemetery II.
6. Conical bone point from Cemetery II, identical with points used by the Bororo and the aborigines of the Kuluseu-Kuluene region.
7. Hornfel celt from Cemetery II.
8. Pottery spindel whorl (?) from Cemetery II.
9. Small pot with painted decoration, from Cemetery II.
9 a, b. Decoration on two other pots similar to Figure 9.
10. Kuluseu-Kuluene pottery vessel.
11. Kuluseu-Kuluene pottery vessel with painted decoration.
12. Kuluseu-Kuluene pottery vessel with incised decoration on the rim.
13. Kuluseu-Kuluene pottery vessel with painted decoration.
14. Pottery bowl with painted decoration on inner surface, from Cemetery II.
15. Small pottery vessel from Cemetery II.

PLATE

000

16. Modern São Lorenço Bororo globular pottery vessel; it is of thin, black ware, different from that of Figure 17.
17. Globular urn (type *b*) from Cemetery II.
18. Another type of globular urn from Cemetery II.
19-21. Large urns (type *a*) from Cemetery II.

XXI *176* Basket weaves. Figures 1-8 are from the Kuluseu-Kuluene region; 9 and 10 are São Lorenço Bororo weaves. Note the use of feathers.

XXII *177*
1. Bamboo blade on arrow of the Pirigara Bororo. It is attached directly to the reed shaft and is 32 centimetres in length.
2. Same as Figure 1, but the bamboo is of different cross-section.
3. Hardwood, serrated arrow blade of the Pirigara Bororo. It is attached to the reed shaft. There are 140 barbs on each side.
4. Bone arrow point of the Kuluseu-Kuluene region. It is set on a foreshaft of wood diagonally, and is bound to it with cotton string and cemented with wax. Wax has also been used to decorate the foreshaft.
5. Conical bone point from the Kuluseu-Kuluene region. It is set on a wooden foreshaft, held in place by wax. The Bororo have similar points, though they are generally smaller.
6. Reed arrow of the Kuluseu-Kuluene region with slit tucum head. When propelled through the air a whistling sound is produced.
7. Blunt-headed spear of the Kuluseu-Kuluene region with slit tucum nut shell.

8 a. b. c. Kuluseu-Kuluene styles of tying bow string.

9. Typical Kuluseu-Kuluene bow. 2.33 metres in length is average for the region. Some are perfectly straight with the bow string relaxed, but others show slight curvature.
10. Bow decorated with red, blue, black, and yellow feather mosaic—Pirigara Bororo. The specimen shown measures 1.60 metres in length.
11. Pellet bow from Pirigara. Length 1.23 metres.
12. Pirigara Bororo bow decorated with taquara cortex and string.
13. Pirigara Bororo bow decorated with taquara cortex and feathers.

14 a, b, c. Cross sections of bows from the Kuluseu-Kuluene region.

15. Feathering on a Yawalapiti whistling spear. This is a unique specimen.

PLATE

16. Xingu sewed feathering on arrow from the Kuluseu-Kuluene region. 000
17. Kuluseu-Kuluene unfeathered butt of arrow.
18. Pirigara Bororo arrow feathering. Note the feather mosaic on the shaft.
19. Pirigara Bororo feathering.
20. Kuluseu-Kuluene arrow feathering with slight spiralling.

XXIII *178*
1. Decoration in black on outer surface of Naravute calabash.
2. Common design used on inner surface of calabash from the Kuluseu-Kuluene region.
3. Design pattern on inner surface of Kalapalu calabash.
4, 5. Bakairi calabash with painted decoration in black on outer surface.
6. Unusual decoration on inner surface of Baikiri calabash.
7. Decoration on inner surface of Baikiri calabash.
8. Naravute calabash with painted decoration on outer surface.
9. Inner surface of Naravute calabash.
10. Inner surface of Yawalapiti calabash.
11. Inner surface of Tsuva calabash.
12. Outer surface of Yawalapiti calabash.

XXIV *179*
1. Yawalapiti comb. The teeth are of bamboo splints, some of which are dyed black. The transverse pieces are also of bamboo.
2. Spindel of the Baikiri and Tsuva.
3. Spear-throwing stick decorated with basket sheath; 7.4 metres in length.
4. Tsuva seat of taquara, bearing incised geometric designs.
5. Mehinaku paddle.
6. Yawalapiti paddle.
7. Kalapalu paddle.
8. Ceremonial headdress of the Naravute.
9, 10. Painted gourds for headdress shown in Figure 8.
11. Wooden pestle.
12. Bird stool.
13. Plain stool.

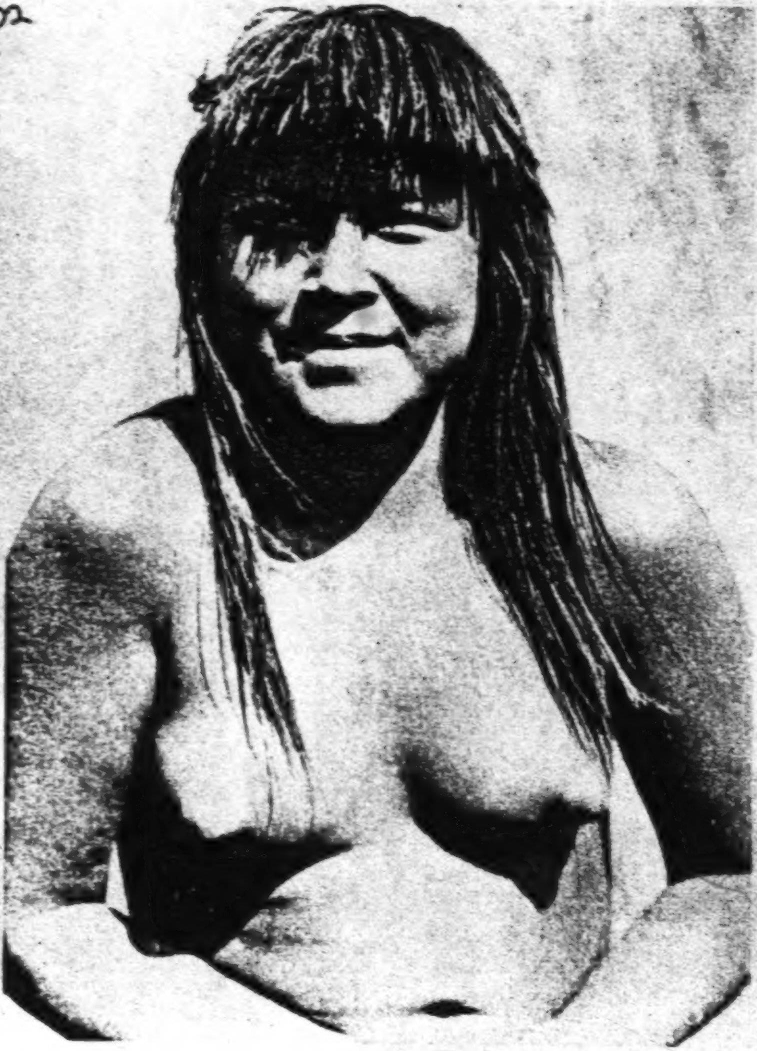
XXV Map of Matto Grosso. (*Facing page 180.*)

3:Petrullo E-5 (1931)1932

SP8 Bororo

Yaruma SP25

142
302



TSUVA GIRL

[P. 90]

[Frontispiece]
[Plate I]

PRIMITIVE PEOPLES OF MATTO GROSSO

An Account of Archaeological and Ethnological Field Work at the Headwaters of the Paraguay and Xingu Rivers in Matto Grosso, Brasil, During 1931

By Vincent M. Petrullo

THIS account of my field work in Matto Grosso, Brasil, during 1931, 114
is offered to those interested in primitive peoples and especially 121
in South American archaeology and ethnology, with the sole motive of
making available source material. The paper is not intended as a critical
study of the region with which it deals nor does it purport to be thorough
in its treatment of the subjects that it discusses. To my critical readers
I plead the fact that I was a novice in the South American field at the
time that the material presented was gathered, and that I was among
tribes that are either but slightly known or not at all, and that thus my
difficulties were those to be met by the first workers. One handicap [124]
was lack of interpreters, limiting the field of my investigations to what
was physically observable. However, it is intended that the paper give
the fundamental setting of the cultures with which I came in contact
for any analytical study that may be undertaken in the future.

The work was done under the auspices of the University Museum 122
cooperating with the Matto Grosso Expedition and the Academy of 121
Natural Sciences, whose representative was Mr. James A. G. Rehn.

Both archaeology and ethnology occupied my attention, my project 121
being fundamentally in the nature of a survey of the possibilities that
the country offers in both fields of research and to study the field conditions, rather than to bring back a conclusive and thorough study of
some particular site or tribe. Though the unlooked-for acquisition of an [122]
amphibian airplane by the expedition aroused the hope that a prolonged
stay with some tribe could be made, since the usual excessive amount of 114
time spent in reaching the desired village could be saved by flying the
distance in a few hours, the ultimate results were what had been originally planned for reasons that will appear in the narrative.

Briefly, my work included the locating of a number of archaeological sites and the partial excavation of two of them; visits to the Bororo da

114 Campanha, or Western Bororo, and the Eastern Bororo of the São Lourenço river valley; and a trip to the headwaters of the Xingu river, which resulted in meeting with the following tribes of the Kulusen-Kuluene region: Bakairi, Anahukua, Mehinaku, Aura, known also as the Vaura, Trumai, Yawalapiti, Kamayula or Kamayura, Tsuva, Kuikutl or Cuicuru, Kalapalu, and Naravute. Of these the Tsuva have never before been reported, and the Kalapalu, Kuikutl, and Naravute have not been described, though visited for the first time in 1920 by Major Ramiro Noronha while engaged in surveying the Kuluene river. The others are either described or mentioned by Karl von den Steinen and Max Schmidt.

So many stories have been told by travelers in little-known countries of the discovery and the collecting of remarkable material which was subsequently lost to science through some adventurous happening, that I hesitate to add another to these sagas of exploration. Nevertheless, as a matter of history, mention must be made that on the descent of the Kulusen river we met with an accident under remarkably prosaic conditions which resulted in the loss of my Bakairi and Anahukua notes and collections, and the more serious loss of a great deal of equipment, which forced a more hasty itinerary and did not permit me to bring back any anthropometric data nor to carry out the work in racial blood grouping that had been projected. Modern equipment in the form of an airplane saved the trip from being entirely fruitless. By bringing fresh supplies of food and ammunition, it made possible the reorganization and continuation of the work, though the stay in the region was not as long as had been intended.

000 The projects of the Matto Grosso Expedition were many, and it is with regret that I cannot include a discussion of them in the present report. However, it is with pleasure that I take the opportunity of acknowledging my indebtedness to my companions on the expedition, with whom I shared so many pleasant and unpleasant experiences, and other things that fall to the lot of those traveling in little-known territory. Especially do my thanks go to those who were concerned with my work more intimately, and at times shared in bringing it to a successful end: to Mr. E. R. Fenimore Johnson; to Mr. Arthur P. Rossi, who is responsible for what photographic records we have of the Xingu region; to Messrs. Floyd Crosby and Ainslee Davis for photographic and sound recording; to Mr. Charles Lorber, the pilot of the amphibian plane, and

to Messrs. Joseph Saucedo and John Dee, co-pilot and radio operator 000 respectively; to Mr. John S. Clarke, Jr; to my Brasilian 'camaradas' and Bakairi canoemen, who followed me so courageously into a region that is not devoid of danger, and to whom a large share of the credit for the success of the venture is due; and to Mr. Giacomo Ancil.

To others not so intimately connected with my field work I am no less obligated. To Mr. Eldridge R. Johnson for his generosity in placing [122] at my disposal the amphibian plane, without which my survey would not have been carried out over such a vast region, and which was instrumental in averting a tragic end to the Xingu venture; to General Candido Mariano da Silva Rondon, who so courteously granted the expedition permission to enter the Indian country, favoring us with his personal interest and friendship and with countless kindnesses; to Major Ramiro Noronha for the infinite pains that he took to give us all the information at his disposal concerning the region that only he knows so well, and for his intimate interest in our welfare; to Dr. Benedicto Duarte Monteiro and Dr. Alvaro Duarte Monteiro of the Inspectoria de Protecção aos Indios.

I further wish to thank the following institutions and individuals that in some way or other helped me in my task: Dr. Jules Freund of the Henry Phipps Institute; Dr. Max Schmidt for his advice and mapping out for me many projects; Dr. E. Roquette-Pinto, the director of the Museu Nacional, and Dr. Heloise Alberto Torres, of the same institution; Dr. A. Amaral and the Instituto Butantan for numerous courtesies and supplying Dick test material; the Inspectoria de Protecção aos Indios; Mr. John Gordon Ramsey for his hospitality and permission to excavate at Descavaldos; Miss Eleanor M. Moore for making [126] the six plates of drawings; Miss M. Louise Baker for drawing the map.

* * * *

Dr. E. Roquette-Pinto has expressed the opinion that to-day the 000 most interesting groups of mankind are those to be found in the northern forests of Matto Grosso. Investigating the section of the state which he has called Rondonia, he found numerous tribes with a simple stone-age culture apparently unaffected by what has been happening on the continent of South America since the first arrival of European adventurers. Geographical barriers, and the fact that the surrounding peoples have

Mato Grosso SP1

000 borne the brunt of European aggression have been instrumental in preserving for the anthropologist, cultures that are simple and archaic, and unquestionably of South American fostering.

* * * *

175 Matto Grosso was first entered, by way of the Paraguay river, in the latter part of the sixteenth century by Spaniards. Soon afterwards the Portuguese came from the east, succeeding in traversing the southern portion and even reaching the Andes, the sharing of the wealth of Peru being their goal. In the early eighteenth century, towns were founded on the banks of the Cuyabá and the Paraguay rivers. Following the establishing of these settlements, the southern portion of the state underwent gradual exploration, and its aboriginal peoples inevitable subjugation.

The nineteenth century produced a number of scientific expeditions which descended various southern affluents of the Amazon that have their origin in the highlands of Matto Grosso, but generally the north resisted penetration, so that at the beginning of the twentieth century it still remained largely unknown.

A number of reasons can be found for this. Unquestionably its isolation from the rest of Brazil, being surrounded by geographic barriers that permit entry only from the south, has contributed to its slow settlement. In fact, for the settlers it has held little attraction, until recent times. In earlier times, the desire to reach Peru, or to discover a watercourse linking the Amazon with the Paraguay, or to search for fabled gold mines, led to the penetration of the country.

The second dream drew many expeditions. For many years the hope was entertained—it still is entertained by some adventurers—that shipping could pass from the Amazonian waters to the Paraguayan, under the belief that Brazil was an island. In fact, the theory was not founded without being based on reasonable suppositions. At places the waters of the Amazon system almost meet the waters of the Paraguay, being separated only by a few miles, but the dream of free navigation beyond the headwaters of the Paraguay has never been realized. All of the vast rivers that flow northward to join the Amazon are broken by numerous falls, rapids and cataracts, making navigation impossible except with small canoes. Inspired by commercial projects as these early explora-

MATO GROSSO SPI

tions were, there was loss of interest in the interior of Matto Grosso when the above fact was ascertained.

Thus a large portion of the vast territory has remained a great hinterland, still little known and as difficult to penetrate as ever. In the popular literature it is often referred to as the land of lost civilizations, golden cities, fabulous gold mines, diamonds, death, hardships, terrible dangers, and unconquerable aborigines. In short, it is still largely the land of fable rather than a land of reality.

For opening the country, more than to any one else the scientific world is indebted to General Candido Mariano Rondon, who has devoted almost his entire lifetime to exploring the country and pacifying and protecting the Indians. He has led one expedition after another into the interior at great personal sacrifice. He has succeeded in instilling the same enthusiasm that characterizes him, in his assistants, to whom with characteristic modesty he attributes the success with which the expeditions have met. Without any practical laurels to reap, there has been sacrifice of health, and sometimes of life, in doing the country a service not always appreciated nor understood. The humane motive that inspired General Rondon and his subordinates to stop the inconsiderate treatment of the aborigines and to convert them into useful, productive citizens of Brazil, was too idealistic to meet always with the approval of the politicians. However, General Rondon has been successful even in overcoming this obstacle. So successful has he been in his contact with the aborigines that these same people, who a few years ago attacked his parties, have assisted him in building roads, and in putting up telegraph lines. Instead of being harassed by adventurers, these people are protected, taught and encouraged to develop their mode of existence as suits them best.

Matto Grosso is too vast a country even for such an exceptionally indefatigable worker as General Rondon to cover. A great deal of the work has been done by subordinates often leading expeditions into new and difficult territory. Major Ramiro Noronha, geographer, ethnographer and humanitarian, has been the leader of expeditions in the northeastern portion of the state and the only one who has visited many tribes on the tributaries of the Xingu river. Yet the Inspectoria de Protecção aos Indios, of which General Rondon was the chief, and Major Noronha, the leader in charge of the Matto Grosso district, has not com-

M 175 pleted its work. There still are many regions to be explored, and many tribes to be pacified.

* * * *

B
M
133 Straddling as it does the Amazonian and Paraguayan drainage systems, Matto Grosso does not form a geographic unit, but is divisible
topographically into three sections, each differing from the others in
important geographic features. The south, drained by the Paraguay system, is low flat country subject to yearly floods which convert it into a
veritable lake dotted with a few islands to which animal and human
life retreats. At the height of the dry season this same plain becomes
so arid that habitation is limited to the borders of the larger streams or
the larger water holes. For the most part it is open grass country, with
islands of jungle and palm groves to which the wild life withdraws
B during the day. Bordering the streams is found the thick and almost
M impenetrable jungle, presenting two solid walls of green vegetation
136 transformed in season to walls of flowers. In this country, bird life is
rich and varied; mammalian life is plentiful and attains unusual size,
especially in the cat family, one member of which, the jaguar, attains
the size of a female Bengal tiger; tapir, capivara, deer, peccary, and
otter abound, as well as various species of reptiles which crowd the banks
of the rivers during the dry season; fish of many kinds, including the
notorious piranha, crowd the rivers. [Plates II, 2; III, 1; IV, 1.]

M
13 The central plateau area, the chapadão, is in direct contrast with the southern portion, the pantanal. It rises abruptly from the pantanal to some twenty-five hundred feet in a series of steps [Plate IV, 1]. It is an undulating, open, sandstone table-land, cut into segments by numerous jungle-bordered streams that are the fountains of the Paraguay and southern affluents of the Amazon. Flat-topped escarpments, constantly being undermined by the streams, break the monotony of the vast open expanse. These sandy and open wind-swept moorlands are covered with grasses, shrubs and dwarf palms. Though many species of plants may be found, there is no luxuriant vegetation. Likewise, animal life, though it may be varied enough, is not abundant.

Where the Amazonian waters begin to assume the proportions of rivers, the Amazonian forest belt begins. Conditions in certain features approximate those of the pantanal. Bird life is richer than in the

[text continues on p. 98]

Mato Grosso SP1

M
342
501
504

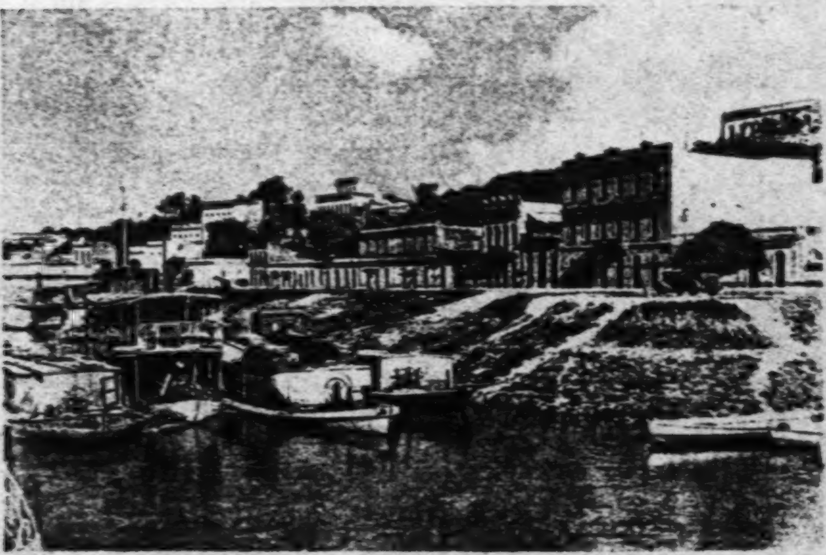


Figure 1. The Port of Corumbá

M
B
133

Figure 2. The Paraguay River at Descavaldos

[P. 97]

[Plate II]

M 13 chapadão, as is also mammalian and floral life. The rivers are likewise well stocked with fish, and as the pantanal originally was comparatively thickly settled, so is this part of Matto Grosso. The quantities of fish seem to determine the density of the population. Indian villages are found along the rivers quite closely together. It is this section of Matto Grosso that is poorly and in some parts totally unknown.

M 361 Most of the southern part of the state is given over to civilized pursuits. The aboriginal peoples have practically disappeared, either having become exterminated or absorbed by the newcomers. From the time of the arrival of the earliest exploring parties, diamonds, gold and rubber have attracted the European adventurer, but now the main activity is cattle raising, though the search for diamonds still continues, especially at the headwaters of the Paraguay and the Araguaya rivers. A number of modern towns thrive along the railroad line, which runs from Porto Esperança on the Paraguay river, eastward. The most important cities are Cuyabá, the capital of the state, and Corumbá, the terminus of the shipping lines from Montevideo and Buenos Aires. S. Luis de Caceres is a typical frontier town, conservatively maintaining an atmosphere of the old colonial days. [Plate II, 1.]

B 361 648 Only the Eastern Bororo, on the São Lorenço, have survived the incursions of the white man. Pacified but a few years ago, they have been collected on reservations, where they still maintain their own culture. Pirigara, Corrego Grande and Rondonopolis, all on the São Lorenço river, are comparatively large settlements.

B 101 The Bororo da Campanha have almost disappeared, and there exist but a few families of the semi-nomadic Guató. These are not of pure blood, having mixed with negroes and whites, and have practically forgotten their original culture. On the Taquary, a few Terenos have been collected in a settlement.

B 101 648 At Barra dos Bugres a few Barbados[1] remain. Their pacification has been completed and they are making rapid progress under the tutelage of the Inspectoria.

000 Further north the Paressi and some Nhambikuaras live in settlements along the telegraph line. The Paressi have shown great adaptability for Brazilian culture.

The Inspectoria maintains other posts, in various parts of the country, but at places like Pedro Dantes it has not succeeded in establishing permanent settlements. [See map, Plate XXV.]

[1] [i.e., Umotina.-Analyst]

[text continues on p. 100]

535
292

[133]
←

[P.99]

[Plate III]

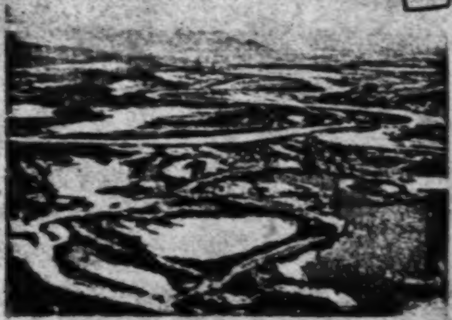


Figure 1. Air View of the Flooded Pantanal

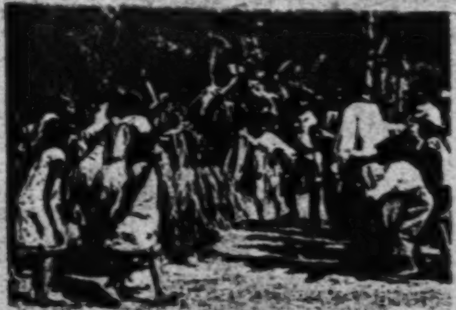


Figure 2. The Jaguar Dance of the Bororo da Campanha

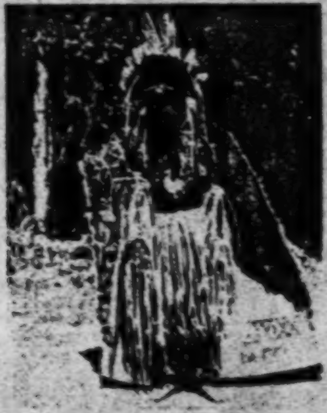


Figure 3. The Impersonator of the Jaguar

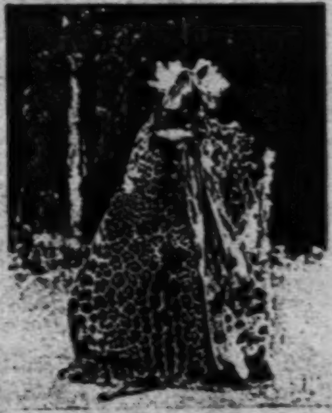


Figure 4. Back View of the Jaguar Costume

Mato Grosso SP1
Mascoi SK10

B M 114 Descavaldos, a cattle ranch situated about two hundred and fifty miles north of Corumbá, on the west bank of the Paraguay river, was chosen by the Matto Grosso expedition as its headquarters. It offered advantages of possessing abundant animal life, the study of which was one of the projects of the expedition, of comparatively good communication with the outside world, and localities rich in archaeology. Unfortunately the aborigines have practically disappeared from the region. A few Guató families still hunt in the marshes to the south, and a Bororo da Campanha village is within a day's ride of the part of the ranch, but its acculturation has gone so far that there is little left for the ethnologist. A few Chiquitos from time to time came from Bolivia, generally with rubber, over the road which probably has been taken by many migrating tribal groups, moving eastward or westward, for Descavaldos is the end of the natural road leading from the Andean Highlands. For this reason archaeological excavation there is of special interest.

Though a narrow-gauge railroad connects Rio de Janeiro with Porto Esperança on the Paraguay river in the southernmost portion of Matto Grosso, the more convenient way of entering the country for an expedition burdened with tons of baggage is by the Paraguay river. On reaching Montevideo from New York, the baggage can be transferred to a large and surprisingly comfortable river boat, and in two weeks Corumbá is reached. For this part of the journey the traveler would do well to equip himself with a hammock and mosquito net of fine mesh.

M 114 To the naturalist, the territory flanking the Paraguay river still offers interesting material, but to the ethnologist, unless he leaves the boat and penetrates to the interior, especially to the west, there is little. The original inhabitants of the territory have given way to the Argentinian, Paraguayan, Bolivian, Brazilian and even the American. The country has been turned to the raising of cattle, or to various manufacturing projects. The world war hastened the process of transformation. With the need of meat in Europe, the country saw boom times, relics of which are deserted pretentious-looking buildings and equipment. However, small groups of aborigines can still be met at the ranches or the factories.

M: 105 177 Whether met in groups or singly, the aborigines that are close to the ranches, towns or factories, show the usual effects of acculturation, which very often results in reducing culture to almost nothing. For example, at Puerto Pinasco were found a band of Angaité, presumably employed

MASCOi SK10
MAto GROSSO SP1

Mi 105 177

to round up cattle for the factory. In the brief time spent with them, no vestige of their own original culture could be discovered. Living in abject poverty under wall-less shelters made of strips of corrugated iron, bits of cloth, and grass, wearing filthy clothing which was hastily donned on our approach, they seemed to have retained nothing but their language. Some Chamacoco and Lenguas that were met presented the same degeneration. However, it is said that when they withdraw to the interior, which is done seasonally, they revert to their own ways.

M 504 633

Corumbá, which was reached in the middle of February, is a modern, comparatively busy port depending on commerce for its existence. The large boats from Buenos Aires or Montevideo leave their merchandise at Corumbá, where it is loaded on smaller wood-burning steamers, to be taken to S. Luis de Careres or to Cuyabá. It is also the real terminus of the railroad line running to the coast from Porto Esperança. [Plate II, 1.]

M 504 484

An air line has for some years been established between Corumbá and Cuyabá, reducing a journey of several weeks to a few hours.

B M 114

While the expedition proceeded to Descavaldos in a small boat and three barges, I flew to Cuyabá, in order to present my credentials to the government and to arrange with the Inspectoria de Protecção aos Indios matters pertaining to my field work. The absence of Major Ramiro Noronha from Cuyabá did not make possible the achievement of my motive. However, since General Rondon, who had received me in Rio de Janeiro, had been good enough to send a telegram presenting me to the authorities at Cuyabá, the records of the Inspectoria were placed at my disposal. The presence of Professor Max Schmidt of Berlin at Cuyabá was a fortunate occurrence. So little is known about the interior of Matto Grosso that the opportunity of conversing with Professor Schmidt and of the Inspectoria field men was indeed a fortunate one. Later, on my meeting Major Ramiro Noronha, and on the reception of a telegram from General Rondon giving the desired permission to enter the Indian territory, Major Noronha, whom I found in Cuyabá on other visits, placed at my disposal and at the disposal of the expedition personal knowledge, especially of a geographical nature, which proved invaluable.

M B 114 123

Perhaps a word ought to be said concerning the attitude of the Inspectoria in respect to foreign expeditions. On arrival at Cuyabá I discovered that it was forbidden to visit any of the aboriginal tribes

[text continues on p. 103]

Mato Grosso SP1

M
133

Figure 1. Air View of the Upper Paraguayan Valley

B
226
411
501

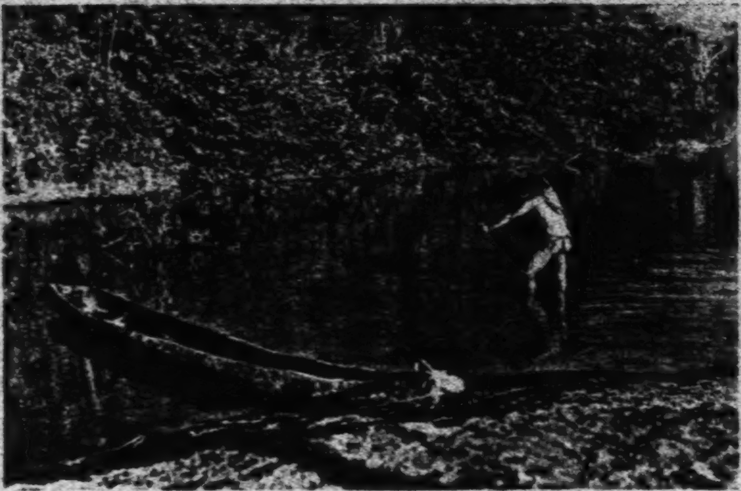


Figure 2. São Lourenço Bororo Shooting Fish

[P.102]

[Plate IV]

M
B
114
123

without special permission from the government. It developed that in recent years a number of foreign expeditions, under the guise of having scientific and humanitarian purposes, well supplied with credentials from pretentious scientific societies, membership in which can be had simply by subscribing to some publication, and often with political recommendations, have applied for entrance to the interior of Brazil. They have been received courteously and often every facility at the disposal of the government has been theirs. Subsequently have appeared sensational articles describing the terrible hardships encountered, and the scientific results have never been made public other than from the popular lecture platform, or have been published in some kind of adventure book. In many cases both the Brazilians and the aborigines have been maligned, and hardly ever is it mentioned that the Brazilian government did all in its power to help the expedition. This modern 'exploration racket' has justly aroused the ire especially of the Inspectoria de Protecção aos Indios, and the attempt is made to keep all foreigners out of the Indian country, unless it is proved without a doubt that the purpose is scientific. An expedition of the above kind which sensationally visited the country a few years ago was well remembered at Cuyabá, and its antics unquestionably caused us much delay. However, when the Inspectoria was convinced of our sincerity, it cooperated with great courtesy and sympathy.

B
M
172

ARCHAEOLOGICAL EXCAVATIONS AT DESCAVALDOS

Early in April, I returned to Descavaldos, and immediately began excavating the first archaeological site on the west bank of the Paraguay river. The water was so high at this time that traveling overland was impossible. Descavaldos was literally an island, and the project of sampling numerous archaeological sites further inland, the location of which I had learned from the natives, had to be abandoned. Intermittent heavy rains threatened to destroy what was uncovered, and the untrained workmen made progress slow at first.

As soon as the water subsided somewhat, another site was opened some five miles away to the north of the first. This site was covered with jungle which had to be cleared. In the place of rains, we had to contend with peccarys and wild cattle. The site differed strikingly from the first in the types of burials.

Mato Grosso SP1

M B 133 361

With the exception of the hills of Dourados, the country between Corumbá and S. Luis de Caceres is pantanal, with here and there a hill or range of hills rising abruptly from the level lowlands. Between Dourados and the Jauru river, the Bolivian border and the Paraguay river, is the vast ranch of Descavaldos, which is larger than Belgium in area, with many thousands of cattle roaming its meadows and an insignificant number of people to testify to its existence as a reclaimed land. Wild life is more abundant than the cattle, demonstrating its great tenacity in comparison to human life. Its original human inhabitants have gone, and new ones, Brazilian, Paraguayan, Bolivian, German and American, have taken their place. A mere handful of Bororo, who are so only in name, remain where there were once thousands.

B M 172 114

But the ranch is rich in archaeology. Its aboriginal population planted in the ground some phases of its culture which have withstood the action of water and other destructive elements. There are numerous localities where the archaeologist can recover some of the products of the arts of the now-extinct tribes. The newcomers to the land have not left these undisturbed. In the making of caña and in keeping it afterwards the large funeral urns that can be so easily gotten from the ground have been found to be excellent receptacles. In the making of new pottery, it has been discovered that the clay of the old mixed with the fresh preparation, gives it a better temper. The result of these two useful discoveries has been the ruthless excavation of a number of sites in a most destructive way. Fortunately the area is a vast one and the population very sparse, and archaeology is to be found everywhere, so that the scientist can still tap fresh and undisturbed sources.

B M 172

It has been known that urn fields are plentiful in the region, and Max Schmidt also discovered petroglyphs in the hills of the Morro do Triompho near the Ilha de Caracaras. The natives also report the presence of mounds or tumuli, from one of which at Agua Verde, located on the Descavaldos ranch, the specimen shown in Plate XIX, 3 is supposed to have come, according to the lessee of the territory. It had been planned to visit the Morro do Triompho and the hills of Dourados to search for petroglyphs, and also to excavate one of these mounds. Climatic conditions interfered, causing the abandonment of these projects, for when the waters were high it was impossible to reach the desired localities, and when they had withdrawn, ethnology was occupying my attention.

[text continues on p. 106]

[P.105]

[Plate V]

142
291
226
302
411
531

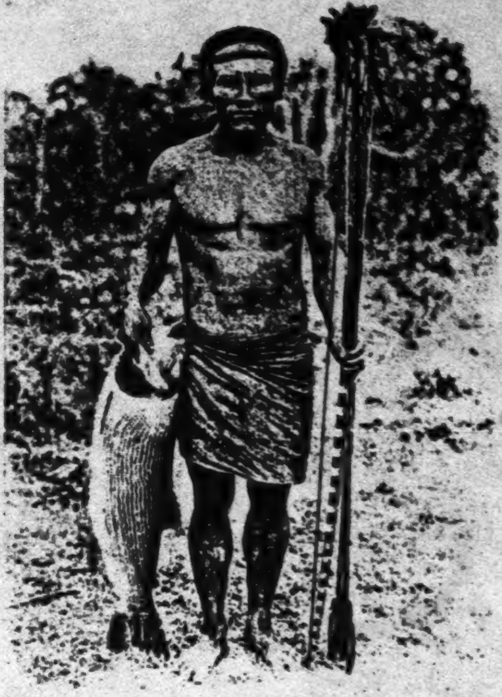


Figure 1. São Lorenço Bororo with Fish He Shot

142
291
302
411

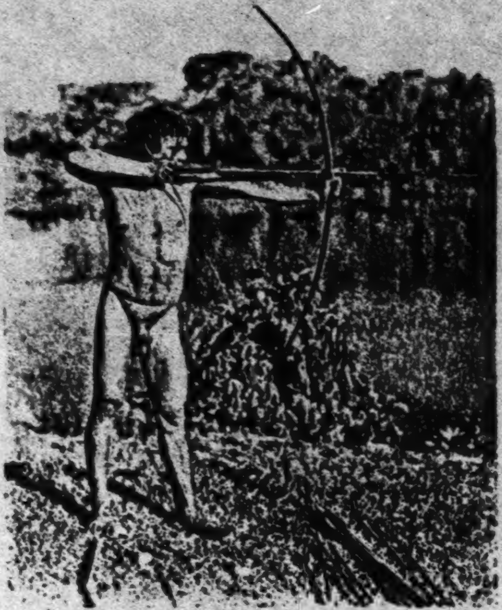


Figure 2. São Lorenço Bororo Drawing the Bow

Mato Grosso SP1

M
361
368

As has been mentioned, in the early months of the year the expedition was practically marooned on what was virtually an island, the port of Descavaldos, where most of the ranch buildings are located. At one time it was a prosperous and thriving settlement, having in addition to the buildings for the officials of the company that owned the ranch, a number of rows of houses for the ranch hands and their families, a factory, warehouses, power plant, hospital, church, and school house. Today the empty, crumbling buildings and rusting machinery attest to its past grandeur. Where hundreds led a busy and gay life, only a few score have remained.

CEMETERY I

[Plates VIII, 1; IX, 1, 2]

M
B
172

The settlement was built on an extensive aboriginal cemetery, whose limits have not been established as yet. For many years archaeological material has been brought to the surface by workmen, but no systematic excavating has been done, though the site was tested by Max Schmidt. While digging a fence ditch, members of the expedition came upon some interesting material, and work was stopped awaiting my arrival, and after that event the withdrawal of the waters, before continuing further.

This section, which was subsequently excavated, is between a row of houses and the waters of a lagoon that sweeps in from the Paraguay proper. At the commencement of the work early in April, it was no more than twenty meters from the water's edge. The buildings, fences, and a large tree that we were not permitted to remove, interfered with extending the excavation in desired directions, after the work was gotten under way. When work was stopped two trenches perpendicular to each other had been made covering twenty-two square metres of ground, at an average depth of one and one-half metres.

For the work, men were drawn from those on the ranch, men accustomed more to the saddle and work in connection with cattle, rather than such a careful and meticulous occupation. However, after it became settled in their minds that the objects uncovered were of importance and interest to me, they made excellent helpers.

Surface Finds

Over the entire area on which the buildings are built, potsherds are found in great quantities, but other artefacts are rare. The withdrawal

MATO GROSSO SP1

M
B.
172

of the water after the flood season often exposes objects, and several interesting pieces were found on the very edge of the bed of the Paraguay, indicating probably that the river has shifted its course since the time that the land was held by the aborigines, a not uncommon thing for the rivers of Matto Grosso to do. One such piece is a broken, polished, thin celt of limy chert. It is two centimetres in thickness, eight centimetres in width, and ten in length [Plate XIX, 1].

Most of the potsherds are of no value, since they show no decoration and no technique different from that of the pottery that is to be found below the surface. Several pieces show impressed string pattern decoration.

A grooved, heavy, polished celt was found on the surface of the section excavated. It is shown in Plate XIX, 2. It is badly and unevenly made of quartzite of coarse texture.

A polished, grooved, round fragment, measuring five centimetres in diameter and eight centimetres in length, may have been the upper part of a pestle. Another piece may have been used as a hammer stone.

At all levels between thirty centimetres below the surface and the floor of the excavation which was the top of the hard pan, were found burials, most of which were badly preserved. The action of water, and roots of the tree, and probable disturbance during the construction of the buildings, had broken many of the pots and damaged the skeletal material.

The hard pan was struck at an average depth of one and one-half metres. At several places, with much labor, it was excavated to a depth of ten and fifteen centimetres, but this brought forth nothing. Lack of time stopped further investigation in this direction.

No evidence of any geological stratification appeared on the walls of the trenches, so that the dating of the site is impossible by this means, except to say that it is of a recent date.

The site yielded abundant pottery, shell and teeth ornaments, but very little skeletal material could be preserved with the materials that we had. However, several skull caps, one skull minus the lower mandible, and a skeleton minus the head have been brought out but have not been studied by a competent person as yet.

[text continues on p. 109]

142
291
301
302

[P.108]

[Plate VI]

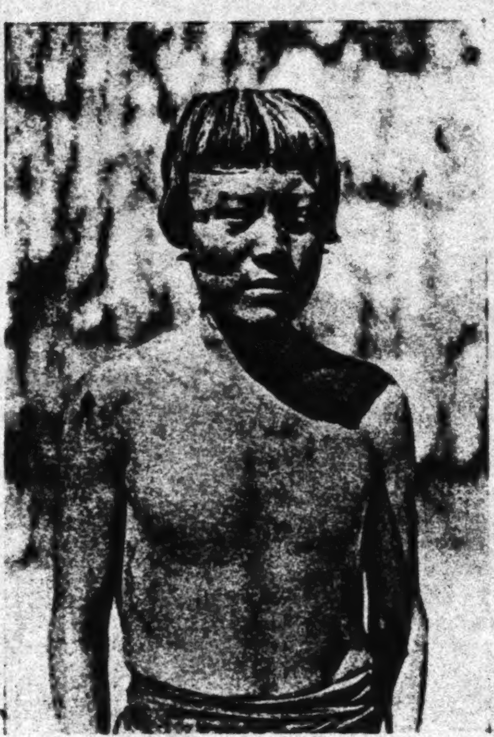


Figure 1. São Lorenço Bororo with Facial Painting

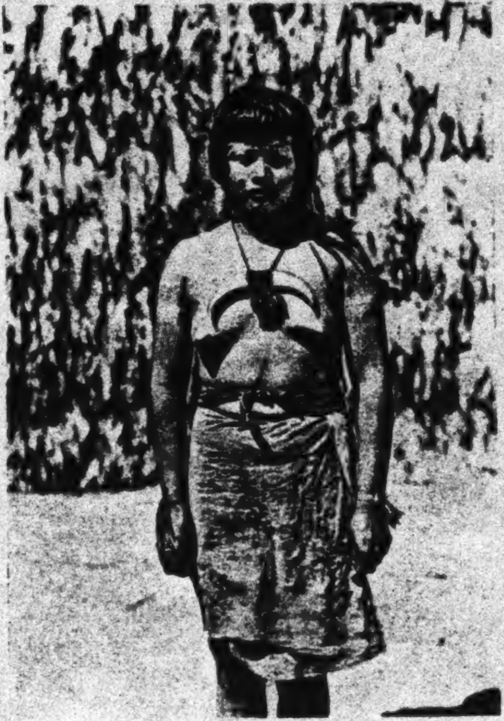


Figure 2. São Lorenço Bororo Girl

MATO GROSSO SP1

M
B
172

Scattered everywhere, and sometimes definitely associated with the burials, were found a large quantity of aquatic shells [Pomacea australis (Orbigny)].

So close together were some of the burials that in some cases they overlapped. Though not enough burials were uncovered to determine this without further question, from what was found, there is indicated that the burials were grouped. In order to make the description easier to follow, the term 'unit' has been adopted, referring to a find that is considered to be separated from the others, though it may originally have consisted of more than one burial.

Unit A

At a depth of thirty centimetres there was uncovered an inverted yellow pottery bowl, but slightly damaged, measuring about thirty centimetres in diameter and ten in depth. There are marks on the surface which indicate that it was made by the coiling technique. On the whole it is poorly made, and bears no decoration of any kind.

Underneath it were found a number of small, fragile mussel shell beads and perforated monkey teeth. No bone fragments of any species were associated with this unit. However, the presence of the teeth and beads is good evidence that originally a skeleton had lain under the bowl. In all probability it was that of a very young child, the fragility of the bony material accounting for its disappearance under the climatic conditions.

Unit B

This unit was located at a slightly lower level than A, and about a metre away from it. It consisted of an inverted pottery bowl, slightly smaller than the bowl in A, of red ware, in excellent condition. On its removal it was discovered that it had been covering another bowl of elliptical shape which rested on a skull. It was found that this second piece fitted the top of the skull exactly, so that it must be concluded that it was made for that purpose. The skull rested on its base, facing the southeast. It was that of a young person, and its bones were poorly preserved. In spite of all the care that was taken, most of it crumbled when the attempt was made to remove it.

At the base of the skull and close to it were several shells, and also perforated teeth, a few long, cylindrical jasper beads, and the fragile

M
B
172

mussel shell beads that were found with A. In addition there were a few long bones of some bird or mammal, which because of their fragility could neither be taken out nor identified.

Unit C

A badly preserved skull, at a slightly lower level than B, and at a distance from it of one and one-half metres. It was not protected by any pottery, and no artefacts were found associated with it. It was the skull of an adult.

Unit D

About a half metre away from C appeared an inverted bowl of approximately the same size, shape, and workmanship of A. Under it were some unidentifiable fragments of bone and some mussel shell beads. Being on the same level as C, this unit may very well have been a part of the C burial, shifted and separated from it subsequent to the interment, by the action of the water and other disturbing elements.

Unit E

At a depth of half a metre and about two metres away from D was uncovered the skeleton of a child, unprotected by any pottery. The child had been placed on its back, the knees drawn up to the chest, the lower leg doubled on the femur. The greater portion of the skull had disintegrated, but a few teeth remained. All of the bones were badly damaged and could not be preserved. No grave furniture of any kind was found in association.

Unit F [Plate IX. 2]

Work stopped from progressing in the direction taken by D and E, by the foundations of a wall. the trench was extended in the other direction from A and later swung to the right so as to be at right angles to the original trench. In this new section were uncovered a number of overlapping burials, which, though badly preserved, nevertheless added considerably to the material.

[text continues on p. 112]

[Plate VII]

[P. 111]

142
291
301
302

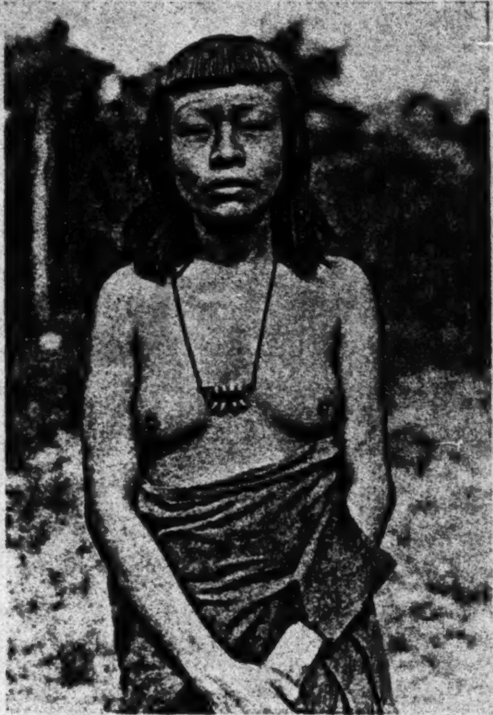


FIGURE 1. SÃO LORENÇO BORORO GIRL

142
301
302
304

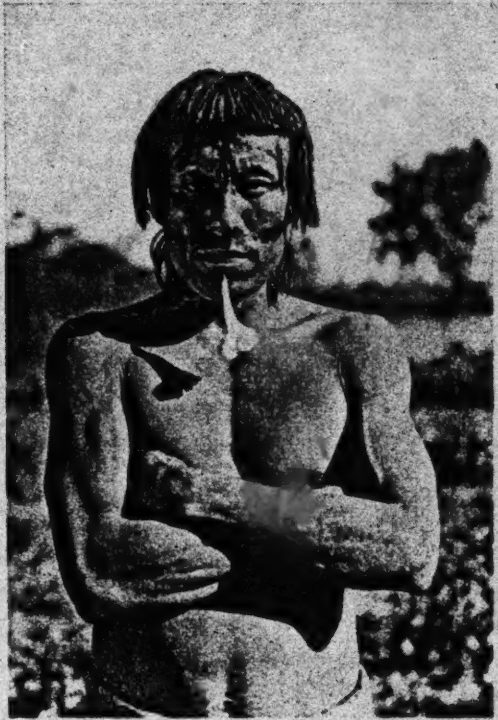


FIGURE 2. SÃO LORENÇO BORORO WITH A FLOWER LABRET

MATO GROSSO SP1

M
B.
172

About two metres away from A were a group of overlapping burials in the same level. After clearing away the debris, burial F was isolated and was found to be in a fair state of preservation.

This unit was first revealed as three inserted bowls, all badly broken. On their removal a skeleton of a young person was uncovered, lying on its back, its head slightly turned to its right, its knees drawn up and outward, and its feet together, thus forming with the legs a diamond-shaped figure. It was orientated northwest to southeast, with its head to the northwest.

Extended at its right side, with the fragments of the skull partly resting on it above the pelvis, was the fragmentary skeleton of some small mammal, probably a monkey, also carefully covered with a pottery bowl.

The skeleton, besides occupying such an odd position, showed other peculiarities. The head was large, and judging from the formation of the teeth it must have been an individual past puberty. The bones of the legs, in contrast, were puny, being both thin and short. Around its neck and chest, still in position, perforated teeth were found, in such a quantity that the bones were entirely hidden by them. On their removal a still greater quantity of small perforated shell discs, in position so as to make any other inference than that they formed a necklace impossible, were about the neck and extended partly down the neck. A good number of the same cylindrical jasper beads were scattered among the perforated teeth and the perforated discs.

The small skeleton of the mammal likewise was adorned with a necklace of the same cylindrical jasper beads.

Several aquatic shells were found associated with the burial.

No other artefacts of any kind could be found.

Most of this skeletal material has been preserved.

Unit G

Close to the left of the head of F, a number of burials must have existed, but we found only debris consisting of potsherds, beads, perforated teeth and bone fragments. One small pot was preserved whole, but it was found to be empty. It may have belonged to unit F originally. It is a small, globular pot with a broad rim decorated with impressed

MATO GROSSO SP1

string patterns, similar to the decoration found on the surface potsherds already described.

M
B
172

Unit H

This was located about one and one-half metres away from G, and at the same level. It consisted of a well-preserved adult skeleton of large proportions, lying on its right side, the knees drawn up to a sitting posture, the lower legs flexed on the thighs. The skull could not be located. No pottery or any kind of ornaments were associated with it; but it did present a new feature in that at its back was found a cache of piranha jaws and teeth. The body lay in an east to west line.

Unit I

A number of burials were uncovered about a metre away from H and to its right. They conformed to the general type. Four pottery bowls, badly damaged, covered skeletons, one of which occupied an extended position on its back. The other skeletons were so damaged and so mixed that little information could be gotten. There was total absence of any ornaments, but the shells described above were also associated with this group. The bone material was that of children.

In addition to the above finds there were recovered from accidental excavations nearby a skull minus the lower mandible and a skull cap. They have not been studied as yet.

* * * *

Lacking any geological data on which to base an estimate of its antiquity, it is significant that no artefacts of European origin were found in the excavation.

Though most of the skeletal remains were those of children, it cannot be inferred that the site is a child cemetery, when it is remembered that infant mortality is especially high among primitive peoples.

The method of burial for children seems to have been a simple interment protected by pottery. Ornaments such as the children wore were placed with the bodies.

B
[171]
[301]

Of these ornaments, the perforated shell discs are still very common among the tribes of the upper Xingu which were visited later, but were not found either among the Bororo da Campanha or the Bororo of the

[text continues on p. 115]

Mato Grosso SP1

M
B
133
172

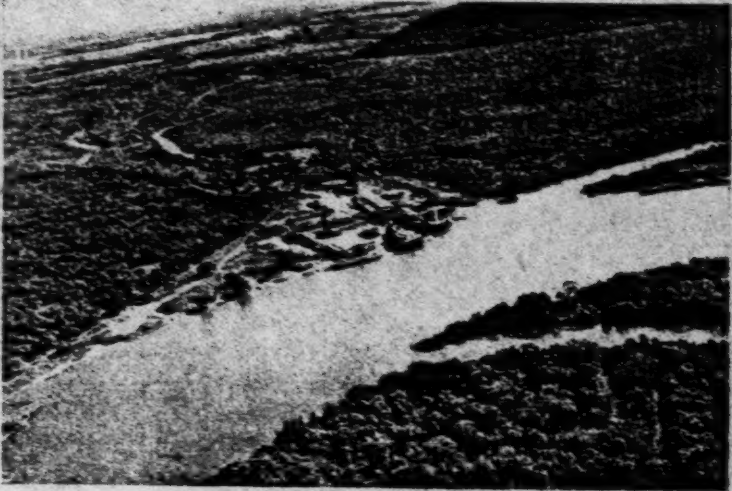


FIGURE 1. AIR VIEW OF DESCAVALDOS SHOWING LOCATIONS OF THE CEMETERIES

M
B
172

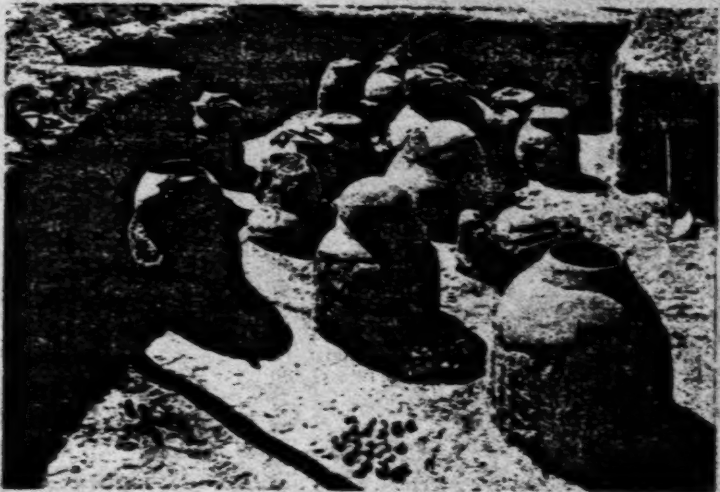


FIGURE 2. A SECTION OF CEMETERY II

[P. 114]

[Plate VIII]

São Lorenço valley. The mussel shell beads and the cylindrical jasper kind are not to be found among the Bororo or those groups mentioned above. M B 172

The method of burial of the Bororo is radically different from what was revealed in this excavation, leaving no doubt that the cemetery must antedate the occupation of the territory by these people. B [301 171]

The piranha is associated in magico-religious concepts of the tribes of the Kuluseu-Kuluene region. Its jaws and teeth find practical application by all of the aborigines, being used as scrapers, or cutters. The cache of piranha jaws and teeth thus becomes meaningful. B [764]

The body was not buried always in the same position. The site revealed that it was placed sometimes on the side, and sometimes on the back, with the legs flexed at various degrees.

All of the burials were unquestionably primary, judging from the articulating position of the bones. No marks of any kind were found on the skeletal material.

The pottery is of poor quality, being of coarse clay and badly fired. The decoration that was found on several potsherds and on one small pot was impressed string pattern. The pottery ware is different from that made by the Bororo. B [323]

The lithic industry is too poorly represented to permit any conclusions. What was found is polished, and badly made. Its scarcity suggests that it was not a major industry in the culture represented. However, the stone, if not the artefacts, must have been imported from the highlands of the west or the north, since there is no stone in the region.

CEMETERY II

[Plate VIII, 1, 2]

About five miles to the west of Cemetery I, and the port of Descalvados, is located Cemetery II, part of an extensive archaeological site whose limits have not been determined. The land is slightly elevated from the rest of the pantanal, so that during the floods it forms an island, but at the height of the dry season it remains partly surrounded by a large lagoon which is connected with the Paraguay only by marshes. When the water is high it can be reached by canoe from the Paraguay. It constitutes an ideal location for a native village, in that it is situated in the pantanal where game is plentiful, it is close to the river, though hidden

Mato Grosso SP1

M
B
172

away and protected by swamps, and it is always close to good water. The site is completely covered with thick jungle growth.

The same men that excavated Cemetery I were employed on Cemetery II, and they proved very ingenious in solving the new problems that arose, in clearing the site, in excavating and in transporting the archaeological material to the port.

An area seventy-five by twenty-five metres was cleared of all underbrush, and staked out in five-metre squares. Though this did not include the entire site, it was enough for our purposes. On the removal of the vegetation, clusters of rocks were found scattered about. In every case such clusters marked the location of a group of funereal urns. Another way of determining fertile places employed by the natives was to stamp on the ground. If this happens to be done over an urn a sound like beating a drum is produced.

At several places the site had been disturbed by the natives and ranchers, who sought to excavate the large urns intended to be put to domestic use. They had not been always successful in taking out whole pots, as several broken urns attested.

It was so late in the season that rains did not interfere with the excavating, but being away from the ranch settlement, we had to contend with cattle and peccarys that formed the habit of visiting the site at night. It became necessary to build a strong fence about the area being excavated.

Three smaller sections of the cleared and staked area were opened: one close to the lagoon, measuring thirty metres square; the second, twenty-five metres away from the first and to the extreme right of the cleared section; and the third, about forty metres away from the first and to the extreme left. In this manner, a test of the site was made as to whether it contains the same type of archaeology throughout.

The most fertile of the sections excavated was the first, and since the others differed in no way from it in the style of pottery or burial found, it only will be described.

In general, the material was in a better state of preservation than in Cemetery I, due probably to the larger and coarser pottery being able to resist the action of water and other disintegrating agents better. Very little skeletal material was successfully gotten out, as in the first site.

Mato Grosso SP1

M
B
172

At places the excavation was continued to almost two metres, but the walls of the cuts revealed no difference in the soil, not even the humus line being marked. In this respect it was similar to the first cemetery, no change of soil occurring until the hard pan was reached.

Surface Finds

These include only material that was found over the areas excavated or to a depth of a few centimeters. As in the first site, the entire area was covered with potsherds, which in most cases revealed nothing that was not learned from the whole pottery to be found under the surface. However, a few pieces of decorated pottery were found. These are shown in Plate XX, 1-4. The decoration is painted in red on red ware. It is rectilinear and consists of broad red lines which are drawn either parallel to each other or criss-cross.

Other finds include:

On the very surface two iron tomahawks, of the usual type.

Three unhafted polished hornfel celts, beautifully made. The average size is about eight centimetres in length, five centimetres in width at the cutting edge and two centimetres at the butt. The greatest thickness is three centimetres. These were found about fifteen centimetres below the surface. [Plate XX, 7.]

One celt, of the approximate size of the above, with a slight groove encircling the butt.

Several jasper cylindrical beads of the same type as those found in Cemetery I.

One large polished quartzite bead.

One large polished hafted quartz pendant [Plate XX, 5].

A small undecorated pitcher-shaped vessel with out-turned rim, crude handle and flat base. It measures but four centimetres in height and is characterized by exceptionally thick walls. [Plate XX, 15.]

Four small round pottery vessels of hemispherical shape with thick rims. Three of these are decorated with painted designs in red.

(a) This is the largest, measuring ten centimetres across the top, and seven in height. Its walls are disproportionately thick, and the rim is made even thicker by a roll of clay, forming the upper border of the painted design, the other being formed by another roll accentuated by incised lines, on each side. The painted decoration is in red, consisting

M
B
172

of parallel lines, criss-cross, and filled-in triangles. A section of it is shown in Plate XX, 9. Close to the rolled rim on one side, the vessel bears a smooth, round hole less than one centimetre in diameter. It was unquestionably put there intentionally by the potter.

(b) This specimen is of identical shape as (a) but smaller, measuring but seven centimetres across the top and four centimetres in height. It bears the rolled rim, and incised lines. The painted decoration is black and consists of lines and rectangular figures, sectioned off. The hole close to the rim again appears. [Plate XX, 9 a.]

(c) Of the same size as (b), and is identical with it except that the rolled rim is heavier and does not bear any painted decoration.

(d) This is the smallest of the four, and is identical with the others, only differing in the painted decoration, which consists of diamond and triangular figures filled in with parallel horizontal lines. The ware is red and the decoration is in red. [Plate XX, 9 b.]

(a), (c), and (d) were found in close proximity to each other at the same level, thirty centimetres below the surface, but not in association with any of the urn burials. (b) was found also about thirty centimetres below the surface and in the section where the urns were closely packed.

B
[881]
[804]
[415]

That the hole served the purpose of passing a string through it in order to keep the vessels suspended seems to be a reasonable assumption, but as to their probable use little that is definite can be said. One of the Bororo da Campanha workmen offered the information that in his boyhood he had seen similar vessels used by the girls in the catamenial periods, especially during the period of the puberty initiation ceremony in connection with fasting. These vessels were used as measures for the amount of water and food the girl was permitted to have; whether it was per day or per meal he could not say. However, the ware is not of the Bororo style, and such vessels were not found in use among the Bororo of the São Lorenço region, so that this suggestion cannot be taken as conclusive.

Another find consisted of several conical bone points, with concave bases, similar to those found on Bororo arrows, and also on the arrows gotten in the Kuluseu-Kuluene region. [Plate XX, 6.]

Five pottery spindle whorls of the form shown in Plate XX, 8.

Between a depth of thirty centimetres and hard pan, we came upon a large number of closely packed pottery vessels, some of which contained fragmentary bone material. Plate VIII, 2 shows part of the excavation. Besides a great quantity of aquatic shells, which were found at all levels in the soil, below thirty centimetres, nothing was found but pottery and skeletal material. Not a single fragment of any artefact could be located, though the earth taken out was most carefully sifted.

To facilitate the discussion, the pottery can be roughly divided in the following types, according to the shape and size:

(a) Large urns with conical bases, bulging sides, forming shoulders, narrow mouths, either with or without a rim collar, and undecorated. These for the most part were found to be empty, except in those cases where the cover had been broken, in which cases they were filled with debris. [Plate XX, 19-21.]

(b) Globular urns, smaller than (a), with or without rim collar, with or without rudimentary handles, undecorated, always containing skeletal material. [Plate XX, 17, 18.]

(c) Bowls undecorated, but for one, of various sizes, used as covers on the urns. [Plate XX, 14.]

The pottery ware is crude, badly fired, and the larger urns are never perfectly shaped. The surfaces show the marks of the coiling technique.

The following units are typical of the site:

Unit A [Shown in the right foreground in Plate VIII, 2.]

A large urn in good condition, of red ware, with a rim collar, measuring .85 metre in height and .80 metre at the greatest diameter. Originally it had been covered with an inverted bowl, the fragments of which were found inside it. It contained no skeletal material and no artefacts.

Unit B

A unique burial group seen immediately behind A in Plate VIII, 2. It consisted of an urn of type (b), bearing a bowl cover. The urn was empty even of debris, but on the outside and packed close to it were remains of three disarticulated skeletons. The bones were in such a bad state of preservation that few of them could be taken out. No artefacts of any kind were found in association.

M
B
172

Unit C

A large urn bearing a bowl cover, the inner surface of which bears a painted rectilinear design in red. The bowl is a large one, measuring forty centimetres across the top and fourteen in depth. In the bottom of the urn were found fragments of bones.

Unit D

A globular urn about forty centimetres in diameter, bearing rudimentary handles. It was covered with a bowl and contained disintegrated skeletal material.

Unit E

Urn of type (a), on which rested another urn of type (b), which was covered with a bowl. Both urns contained skeletal material.

Unit F

One of the largest urns taken out, measuring 1.23 metres in height, and .97 metre at the greatest diameter. This specimen is now in the Museu Nacional, Rio de Janeiro. It bears no decoration. With the debris that it contained was found some skeletal material.

Unit G

A large urn of type (a), measuring .90 metre at the greatest diameter and an equal amount in height. The sides slope in abruptly forming shoulders, terminating in upturned rim collar. It bears no decoration. It likewise was originally covered with a bowl.

B
103
361

Bororo da Campanha

While work continued at the cemetery site, a visit was paid to the remnants of the Bororo de Campanha, collected at a village locally known as Laguna.

B
361

The trip to Laguna was made in the company of Messrs. E. R. Fenimore Johnson, John S. Clarke, Samuel T. Hoopes, Floyd Crosby, the cameraman, and guides. The village is situated on some high ground, covered with palm and banana groves. It consisted of a few huts arranged haphazardly, with that of the headman at the edge of a cleared

[Bororo da Campanha]

361

space, a courtyard where the group meets whenever there is anything to
discuss or celebrate.

Its inhabitants were miserably poor, not having even manioc farina 574
to offer us, so that we had to await the arrival of our ox cart, which had 735
been left behind, to bring mate, a steer, coffee, and other foods. Our
arrival was attended with a slight attempt at some ceremony, but after
shaking hands with almost all of the villagers, the reception was over.
Listlessness and evident ignorance of how to receive us were the main
characteristics, although it was insisted that we sit down, a custom which
I found to be prevalent in every group that I visited subsequently.

While waiting for the cart we took the opportunity of looking about. 342
The huts were made of a skeleton of poles covered with burity palm
leaves, which in the front of the house were placed vertically, with the
leaflets interlaced. They were of a rectangular ground plan, with a true
wall, about fifteen feet high. No hammocks were seen, the people sleeping 352
either on the ground or on raised platforms, wooden frames having
straps of leather to take the place of a mattress. The huts contained no 592
further furniture. Each family had its own hut.

It was learned that only one woman of the village knew how to make 323
pottery, but that none had been made for many years. In fact, no industry 287
whatsoever has survived, not even the making of feather ornaments. 178

The bow and arrow has given place to the gun, of which there were 411
several in the village. Acculturation has indeed gone far, the language 177
being almost forgotten even by the older people. 197

After the arrival of the cart and the distribution of the food was over,
they gathered by a fire in front of the headman's hut in two circles, one 574
for the men and one for the women. We were invited to sit with the 533
men. When all was ready, the headman began to sing to the accompaniment 535
of two gourd rattles, which he shook, one with an up-and-down
motion and the other both horizontally and vertically with a different
rhythm. In turn, his song was taken up by each man. Sometimes the
women and the other men would join in a soft chorus. At times, led by
the oldest woman in the tribe, the women would suddenly stand up and
begin hopping, holding the legs together stiffly, the arms sideward but
horizontally, and, with the hopping, leaning first to one side and then the
other. This was enjoyed by them, especially by the older women. Several [273]
times chicha was passed around. Undoubtedly the song and dance

[Bororo da Campanha]

574
533 would have continued all night had not the visitors finally insisted
535 on retiring to their hammocks.

In the morning there was held a jaguar dance for our curiosity, for it
535 has become quite meaningless to them, no one being able to tell exactly
[182] the significance of the dance.

An enclosure was built of burity palm leaves, roofless, which served
535 as the dressing room of the dancer. No women were permitted to enter;
292 the rites of dressing the dancer to represent the jaguar were evidently taboo to the women. Two singers with rattles stood in front of the man
[302] to be dressed. The dancer was painted red with urucum and down pasted on his breast. His face was also smeared with urucum. Around his arms were fastened armlets made from strips of burity palm leaf, and his face was covered with a mask made of woman's hair. The foreskin of the
[291] penis was tied with a narrow strip of burity palm leaf, for these men under their tattered European clothing still carry this string. A skirt of palm leaf strips was worn, and a jaguar robe was thrown over his shoulders. The skins of practically every species of snake to be found in the
[825] pantanal hung from his head down his back over the jaguar robe, which was worn with the fur on the outside. The inner surface of the hide
[531] was painted with geometric patterns, in red and black, but no one could explain the symbolism. A magnificent headdress consisting of many pieces, and containing feathers of many birds of the pantanal completed the costume with the addition of deerhoof rattles worn on the right ankle. The dancer was ready.

535 The headman facing the dancer began singing to the accompaniment of his rattles, and slowly began backing out of the enclosure, the 'jaguar' dancing before him. The other men followed in line, roaring at intervals in the song. In this manner the enclosure was left and the dance began in the open. The women and children had withdrawn either to the huts or the surrounding jungle, but when the jaguar began dancing in the
[533] open, they came up on the dead run to join the dance. The women did not sing, but the men did so excitedly. The dancer danced flat footed with legs bent and knees thrown outward, arms extended at the side. His dance consisted of violent hops on both feet, and the twisting of his body this way and that with each hop. At the completion of the song the women and children would turn and run for cover, which they did not leave until the singing and dancing were resumed. [Plate III, 2, 3, 4.]

[text continues on p. 124]

3:Petrullo E-5 (1931)1932

M
B
172
↑

Y
114
↓

M
B
172
↑

W
291
302
352
513
↓

[P.123]

[Plate IX]

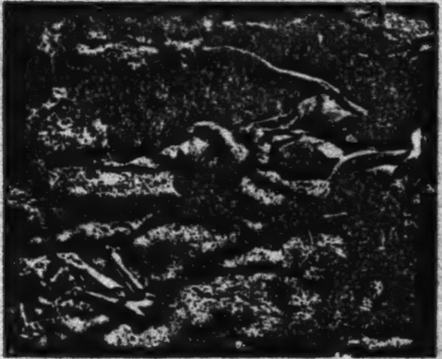


FIGURE 1. A SECTION OF CEMETERY I

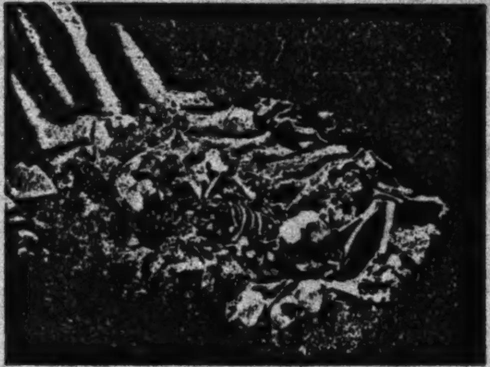


FIGURE 2. A BURIAL (UNIT F) IN CEMETERY I

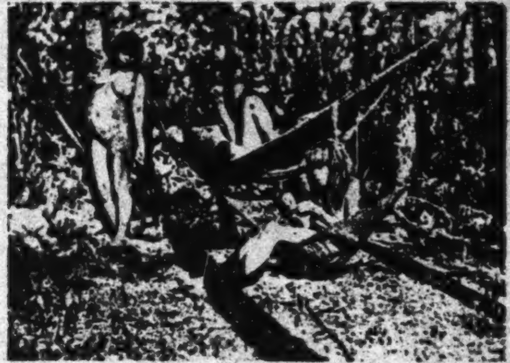


FIGURE 3. YAWALAPITI AND MEHINAKU ENCAMPED AT THE MOUTH OF THE KULUSEU RIVER

SP8 Bororo SP8
Mato Grosso SP1
Yaruma SP25
Waura SP18

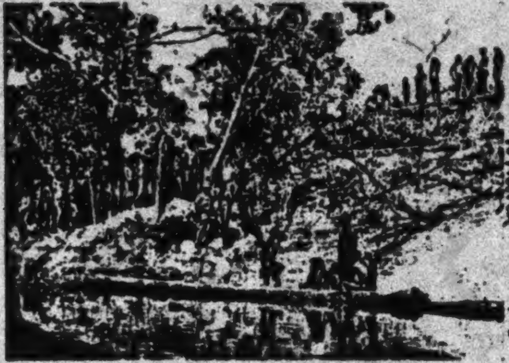


FIGURE 4. OUR ARRIVAL AT THE KUIKUTL PORT ON THE KULUENE RIVER

EASTERN BORORO

B 101 184 361

On the São Lorenço river are a number of colonies of the eastern Bororo, who have not come so much under the influence of European civilization. These people still live apart in their villages and maintain their own institutions and industries. They unquestionably differ from the western Bororo in many ways.

B 114 361

The colonies at Pirigara, Corrego Grande (São Lorenço), and Rondonopolis were visited by the expedition, but Corrego Grande received most attention. Sound motion-picture studies of the dances and industries were made and rich collections of artefacts obtained.

B 361 184 423

Unlike that of the Western Bororo, the village is still an orderly affair, being built in circular fashion with the men's hut in the center. The men actually live in this hut, the other houses really belonging to the women. Fishing, the cultivation of manioc, and hunting are the main occupations. [Plates IV, 2; V, 1, 2; VI, 1, 2; VII, 1, 2.]

B 114

Since an excellent study of a community of Bororo exists by Colbachini, little could be said of a descriptive nature in this brief paper that would not be duplication. Therefore, it is felt that time and space ought to be given to the Xingu trip.

AT THE HEADWATERS OF THE XINGU RIVER

M 114

My original plans were to descend the Kuluene river, which has never been descended by an ethnographer; in fact, only recently has it been mapped by Major Ramior Noronha. However, after several conversations with Major Noronha at Cuyabá, finding that such a plan would add difficulties which would not bring any added results, I decided to descend the Kuluseu and ascend the Kuluene to the Seventh of September, and then to ascend that river. This had the advantage of avoiding a longer overland trip and many miles of rapids, and offered the opportunity of seeing more aborigines.

For purposes of reconnaisance and as a safety measure, it was decided to make use of the airplane. Accordingly, before beginning the overland trip, two flights were made to the north. We decided to depend on water for taking off and landing, since the country did not offer such open runways that landing on wheels would be safe.

Major Noronha had informed us that, after departing from Cuyabá, no landing of the plane would be possible until we reached either the mouth of the Kuluseu or the mouth of the Seventh of September, a distance of approximately three hundred and fifty miles. The first trip was undertaken with the purpose of locating the nearest large body of water and any aboriginal villages en route. Mr. Samuel T. Hoopes, one of the sponsors of the Matto Grosso expedition, accompanied us on this flight, as well as Dr. Benedicto Duarte, of the Inspectoria de Protecção aos Indios. We flew over Chapada and took the route for the Bakairi post on the Paranatinga river. The pilot relied more on Major Noronha's verbal descriptions than on the maps which we had, and which unquestionably were too conjectural. We had to do some flying along the Paranatinga river before we were able to sight the post. From that point we flew northeast, cutting across the headwaters of the Rio Fermo, the Batovy, and numerous smaller ones, which, joining eventually, form the Xingu further north. Having located what we thought was the Kuluseu we flew northward, but we did not locate a stretch which would permit safe landing. Finally we turned back for Cuyabá. During this flight we were in touch with our radio station at Descavaldos and with the Panair station at Para. We reached Cuyabá after over six hours of flying, to the astonishment of its citizens, who had not expected to see us again. [See map, Plate XXV.]

On the second trip we went further than on the first, and finally, the river broadening out, we made a good landing at the juncture of the Kuluseu and the Kuluene. So far we had not seen any villages or canoes on the rivers. At a distance we had sighted smoke, but since the entire area is burned by Indians and Brazilians, either to make new manioc fields or for pasture, we had not attempted to ascertain its meaning. After breakfasting and waiting in the hope that some Indians would appear, we left several strips of cloth tied to a bush with some knives, fish hooks, and mirrors, and took off. We had no doubt that though we had not seen any Indians we were being observed all of the time. A few minutes later we sighted a village. Flying low and circling it several times, we spied running figures making for the jungle and a stalwart line of men holding tall bows in their hands gazing at the plane. All of the people had the appearance of being colored red, even to the head. Another interesting feature was a tipi-like structure which stood to one side of the

[text continues on p. 127]

3:Petrullo E-5 (1931)1932

SP8 Bororo
Waura SP18
Yaruma SP25

W
361
←

Y
342
→

Y
342

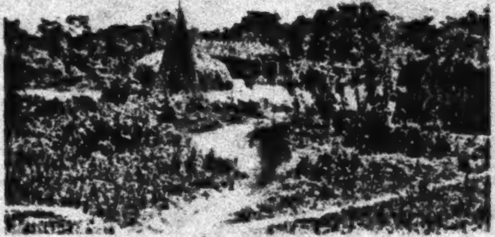


Figure 1. Yawalapiti Village

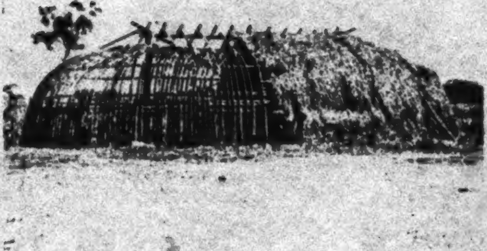


Figure 2. Half-Finished Naravute House

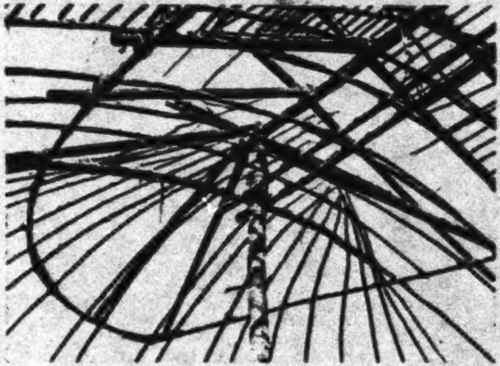


Figure 3. Detail of Framework of Naravute House

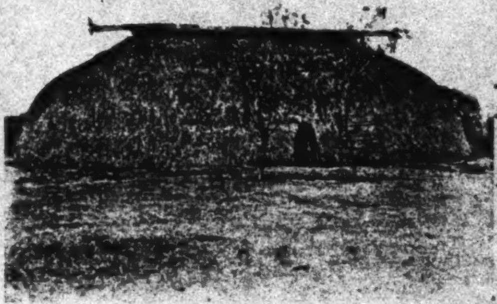


Figure 4. Completed Naravute House

[P. 126]

[Plate X]

Mato Grosso SP1
Bacairi SP7

M
114

clearing. After dropping a sack filled with trade goods, we flew back to Cuyabá, surprising its population for the second time by our safe return. On this trip we had been away almost the entire day, so that practically no hope was held out for us, though there was a rumor that we had found gold, which caused our delay.

The distance from Cuyabá to where the plane could land on the Xingu was so great that if we wanted to do any further air exploring we had to get a deposit of gasoline there. It was therefore decided that I was to transport overland ten cases of gasoline. The plane would pay my party a visit on the sixth week after my departure from Cuyabá, that being the time calculated that it would take to reach it overland, at the same place where we had landed at the mouth of the Kuluseu.

M
114
122

After recruiting four men in Cuyabá, three of whom were recommended by Major Noronha and proved to be the finest that could be employed, we set off for the Bakairi post in two motor trucks. Our baggage consisted of airplane gasoline, an outboard motor, gasoline and oil for it, trading goods, personal equipment and food. No tents were taken for shelter, nor canvas canoes, and so forth. Our food consisted of manioc flour, beans, rice, coffee and meat. In addition, we carried six sealed tins containing emergency rations for a few days, of which we had occasion to make use later. Our camping equipment was as simple as that of the camarada, merely a hammock, blanket and mosquito net. Our only luxury was a portable phonograph, which as long as we had it helped to keep the men and aborigines in good humor.

It took us three days to reach the Bakairi post, after an early end of the expedition was threatened by the breaking of two wheels of the truck. Beyond Chapada the road is good. This section was built by the Bakairi under the direction of Major Noronha. On our way we stopped at the Protestant Mission at Burity, where we were hospitably entertained by Mr. and Mrs. Moser. It is on the property of the Mission that the Veio de Noiva Falls are.

THE BAKAIRI

B
361
648

The peoples of a number of villages speaking Bakairi have been collected at the post, Simões Lopes, on the Paranatinga river. The post consists of a number of excellent government buildings in charge of an agent and a small staff. A little distance away is the Bakairi village, in

BACAIRI SP7
MATO GROSSO SP1

B
361 a wire fence enclosure. The effort of the Inspectoria has been to give
646 aborigines the isolation that they want and not to interfere in anything
that they may do. The tribal organization is kept as of old, and the
Bakairi lead their own life in their own way. They are not forced to
stay at the post, or in any way bound to do as the agent says. The agent
is merely a teacher. He talks to them and advises them on any problem
that may be facing them, but it is understood that they are free men
and that they can do as they please.

B The post maintains a school, the effort being made to teach every
177 child to read and write Portuguese and to learn the rudiments of arithmetic.
648 In addition to this, an attempt is made to teach them vocations,
M such as weaving on the loom, tailoring, shoemaking, barbering, and so
658 forth. Generally, if a boy shows unusual talent he is taken to Cuyabá
and even to Rio de Janeiro to be given further instruction. This education
is not compulsory, however, though most of the Bakairi take advantage
of the opportunity. It is the project of the Inspectoria to form good
self-sustaining citizens of such groups of the native population as come
under its tutelage.

B The post has a herd of cattle and the Indians are being taught the
177 principles of cattle raising. It is the desire of every Bakairi to own
[233] cattle. No attempt is made to turn the Bakairi into a sedentary agricultural
people, it being thought unwise to attempt to transform the
manner of life of the Bakairi by tying them down to the soil, when they
B have been used to a semi-nomadic existence. On the other hand, they
[241] are encouraged to practice some agriculture, raising manioc, sweet potatoes,
some maize and cotton. Each man clears his own land yearly, and
plants his foods.

B In spite of the liberal attitude and practice of the Inspectoria the
164 Bakairi have been dying fast. Fevers seem to decimate them rapidly,
though all efforts are made to keep medical supplies on hand and to
[165] supply medical attention. Their life is not as strenuous as formerly,
because of the improved methods, and this may account for the lowered
resistance. On the other hand, there is no doubt but that at the headwaters
of the Paranatinga it is less healthy than in the region of their
former homes. Even the Indians from the lower Kuluseu who followed
our expedition on its return to the post suffered greatly from fevers
000 upon reaching it, though it was the dry season and there were few insects.

Bacairi SP7

000

Geographically the post is situated ideally on a high land removed from 361
the river and cleared of all vegetation, the jungle appearing only as a 13
narrow fringe along the river banks. Like the rest of the high plateau it
is wind swept, and generally pleasant. It must be added that contact with [164]
white people, such as is had when a small group of natives go to Cuyabá, [177]
has brought syphilis to them, and it may be their mortality is due to this.

One occupation enjoyed in former times is denied them, and that is
fishing. There are practically no fish in the Paranatinga, at least up to 178
where the post is located. Since meat is gotten only on rare occasions, 226
and no hunting is done, the diet is mainly one of vegetables and consid- 262
erably poorer than when they were living in their original state. This
may also explain their lowered resistance to disease.

Very little museum material which represents their own products can 126
be collected from the Bakairi. What has not been gotten from the
Inspectoria has been brought back on excursions to the Kuluseu. Pot-
tery has not been made since their coming to the post, according to them. 177
The huge vessels that they possess either have been brought with them 323
from their former homes or bartered from the tribes on the Kuluseu. 439
It is claimed that the proper clay cannot be found in the neighborhood
of Simõe Lopes.

Arrows are still being made, an iron nail generally being substituted 177
for the old bone point, but most of the arrows also come from the [411]
Kuluseu.

For the old hammock made of palm-leaf fibre the cotton hammock has [352]
been substituted, but the same open net style has been kept.

Mussel shell ornaments have also been bought from the tribes of the [301]
Kuluseu. In brief, almost anything that is found in their village must [439]
bear the suspicion that it is not a Bakairi product.

However, they have preserved a few customs, such as filing the upper 178
teeth to a point, wearing under the European clothing the gee string, [291]
and ceremonial use of the bull-roarer, and they probably remember [304]
many of their ceremonies. [334]

The short time spent at the post was mostly devoted to taking anthrop- 114
metric measurements, which were subsequently lost on the Kuluseu, but 143
in some notes I do find the statement that in blood groupings most belong
to groups three and four, the former predominating.

Bacairi SP7,
Mato Grosso SP1

B
464
[551] Nine canoemen, recommended by Major Noronha, were recruited from
the Bakairi. The nine included Paghuli, or Marcellino, and Apacanu,
both of whom had lived on the Kuluseu before the withdrawal of the
[191] Bakairi to the post. Both of these men can speak Anahukua to some
extent, and are the only men who know how to make bark canoes.
[396] Unfortunately, their Portuguese is poor, necessitating another interpreter. Their knowledge and skill in matters of river travel made them invaluable, however.

B
501 The Bakairi have the reputation of being the best canoemen of the region. The children are taught to paddle from infancy, and become extremely skillful in paddling the clumsy and heavy canoes. The paddle used is short and narrow, and a quick, short stroke is employed, the paddler shifting his paddle from one side to the other with every two or three strokes. Steering is accomplished more by the bowman than by the man in the stern. The use of the stern paddle as a rudder is not well understood. Poling is resorted to by the man in the bow when going up the stream, in which case the efforts of the man in the stern are given to guiding the canoe, which is accomplished by quick shifting of the paddling from one side to the other. Among the Bakairi, as indeed among all of the aborigines encountered, the women are as good paddlers as the men, but they never were seen poling.

* * * *

B
M
114 As soon as our personnel was completed, with the addition of a young
Italian explorer, Giacomo Anzil, who had been forced to abandon his
project to reach the Amazon upon reaching the post, our baggage was
transferred to the backs of oxen and mules, which were to transport it
to the Kuluseu river. The men not concerned with driving the oxen
went afoot. It was indeed an odd caravan. Mounted men busy with the
oxen, men afoot carrying bows and arrows and guns, long-horned oxen,
small mules, filed in a long line across the wastes of the plateau. All of
the men wore a red kerchief wound about the head, and the usual bantering
B
[177] conversation was carried on. The Bakairi, of course, wore trousers
and shirts, and even sandals made of old automobile tires, in imitation
[291] of the Brazilian camaradas.

As we moved eastward and slightly north, it became more often necessary to build bridges for the animals, across small but high-banked

Mato Grosso SP1
Bacairi SP7

B
M
114

streams. Under the hot sun this became hard work, but in general the march was a pleasant one. The start in the morning was made at about eight o'clock, unless some beast had wandered too far off, when there was some further delay. A low fog hid the tall grass from sight early in the morning, but soon afterwards it would lift. In the early afternoon would appear white clouds in the skies that had been perfectly clear, enough to enhance the beauty of the sunsets, and no more. The region is windswept, so that though the sun was hot enough the heat was never unbearable. Camp was generally made in the middle afternoon, by some stream, in order to give the oxen a chance to graze. Skies were invariably clear at night. The temperature fell so suddenly that few slept after midnight, most preferring to huddle around the fire, to talk and drink coffee, which I allowed. Precipitation was heavy during the night, as was attested by our blankets, which were wringing wet by morning. However, the nights were not so uncomfortable that it would have justified the carrying of heavy tarpaulins.

B
M
114
136

In this manner we traveled over the rolling country. Sometimes we surprised deer that bounded off before a shot could be had, though several fell to our guns. Once Tupi, a short-haired New York fox terrier that accompanied me, roused a tapir; the other dogs joining in the chase, it was bayed and killed, a welcome event, for it supplied us with meat for several days. A puma one day caused a great deal of excitement. On being seen, almost the entire personnel gave chase, whirling lassoes, shooting arrows, whooping, yelling and laughing. It was finally shot. Several mutung, birds whose meat was found to be excellent, were killed in the jungle patches bordering the streams.

B
M
114

We passed near two deserted village sites which the Bakairi identified as being Kayapó. Traveling on schedule, however, we were not able to stop to investigate archaeological possibilities.

M2
B
M
114

On the sixth day from Simõe Lopes we entered more wooded country, necessitating cutting a way through, and on the seventh day we reached the banks of the Kuluseu river below the mouth of the Prame. This last day was marked by an accident to one of the tame pack oxen. It fell, breaking its back. For the wild steer that we had taken with us, its face covered with a leather mask so that it could not see where it was going, but naturally followed the other oxen, this was fortunate. The hurt ox was killed and its meat dried. The steer was sent back to the post

B
M
114 in the morning with the other oxen, with another extension on its life span. The extra men that had driven the oxen also returned to Simão Lopes, their fear of attack by the Kayapó hastening their journey back.

We were now totally out of touch with the world that we had left. The underbrush of a patch of jungle was cleared for our camp. This was always our practice, the insects and the moisture being less troublesome there than in the open. Furthermore we could swing our hammocks between trees, whereas it would have been necessary to set up hammock poles were we to camp in the open. As to danger of attack by the aborigines, it was felt that one is equally safe in the forest.

The following day the Bakairi began the search for suitable jatuba trees, for our canoes were to be made from the bark. The Bakairi set out early, without the customary breakfast, and carrying nothing but their weapons, without which they would not stir from camp. Were a man to eat before setting out to locate the trees he would never find one, they said. In case, by some fortuitous accident he did, the bark would be too thin, or too thick, or too dry, or would crack. Therefore nothing must be eaten until the trees are found. In the afternoon they returned with news that several had been located and also that a trail marked with broken twigs had been discovered running almost in a circle around our camp, indicating the presence of the Kayapó in the neighborhood. During the night it was claimed that strange calls were heard, but during our stay at this camp we were not molested.

For the comfort of the Brazilian camaradas I permitted the making of a dugout canoe; with this sort of watercraft they were familiar, but were distrustful of the bark canoes. Subsequently I had occasion to repent my decision and they their request.

B
396 In four days the Bakairi made six canoes, two of which were of good size, each capable of carrying an estimated load of fifteen hundred pounds. The dugout was not completed until the seventh day, and it proved hardly serviceable then. Its only baggage was two cases of gasoline, and it gave infinite trouble to its men in the rapids because of its non-flexibility and great weight.

On the other hand, the jatuba bark canoe is flexible; this feature, combined with the thickness of the bark, diminishes the chances of perforation or capsizing on hitting a submerged rock or tree, which cannot be avoided, especially in the upper waters of the rivers. Such a

Bacairi SP9

B 396

bark canoe suffers little or no damage where a dugout would either capsize or split. Canvas canoes would tear too easily.

When a jatuba tree suitable in size and condition of the bark is found, a platform of slender poles is built around it. Three upright poles are set up forming a triangle around the tree. Cross pieces in which the worker stands are lashed across from pole to pole. The outline of the canoe is then marked on the tree and is peeled off carefully by driving in flexible wedges in between the bark and the wood. B [401]

The bark thus gotten is bent into the proper shape by building a smouldering fire on its inner surface and by means of poles used as levers on the sides, forming eventually a framework in which the canoe is wedged. The bending in of the sides too much is prevented by cross pieces. Sometimes the maker etches out a design on the outer bark.

The canoe thus obtained is a shallow affair and practically flat bottomed, which gives it stability. The bow is open and clay is used along the edges as a bank to keep out the water. The stern is raised somewhat but often water enters by it likewise.

The Bakairi, while making the canoes, fasted until the end of the day's work, when they ate pure food, in this case rice, farina and meat. It was explained that really they should have eaten nothing but piranha and biiju, foods that we did not possess. Sexual abstinence is necessary, and were some women in the catamenial period to pass nearby, the bark would split. After work is begun no one, in fact, must approach, and if he, unaware that a canoe is being made, does come near, he must not leave on any account. B 396 784

Though we found other signs of the presence of aborigines in the neighborhood we never saw them; but that we were being watched carefully, there was no doubt. 000

With overloaded canoes we finally embarked on the next lap of our journey to the mouth of the Kuluseu river. For another seven days we worked in the rapids, fatiguing and morale-destroying work. Often we had to cut our way through fallen trees; for long distances canoes were dragged over dangerous stretches; many times the canoes had to be unloaded and the luggage portaged. The men worked naked in the water, and it remains a marvel how we came past the rapids without having suffered some serious injury and without having lost either canoes or baggage. However, the work in the water told on the men

Bacairi SP7
Yaruma SP25

000 and a number went on the sick list with fever. From this time on, at least three of my fifteen men were daily suffering from some malady that incapacitated them for hard work.

B 361 103 Just below the rapids formerly were located a number of Bakairi villages, as reported for instance by Von der Steinen. We passed the sites of the villages known as Marika, Igaeti, Maimeti, names meaning mosquito, harpy eagle, and turtle, respectively.

000 At this time some of the camaradas began to show restlessness, especially one man that I had brought from Descavaldos to act as my foreman but who had failed in most of his duties to show the efficiency necessary. This, the fact that there was so much illness, and because we were behind our schedule, urged me to make use of the outboard motor now that we were in clear water. Accordingly three canoes were lashed together and the other four were towed in pairs. We made good speed, but an odd change came over the men. From being expert canoemen they became clumsy in their movements, as if that were the first time that they had seen canoes. Also, having nothing to do, they became increasingly restless in their places. This resulted in disaster several days later, after we left the Anahukua, at whose port we had encamped.

Y 123 622 Pressed for time in order to keep our scheduled meeting with the plane at the mouth of the Kuluseu, the Anahukua village was not visited. We camped opposite their port late in the afternoon, and soon afterwards Aloike, the chief headman, and some of his followers, appeared on the opposite bank. He came alone, since none of his men apparently had the courage to visit us. A few gifts were made to him and he went over, promising to be back in the morning with his people and food for us.

Y [262] Aloike kept his word, for in the morning the opposite bank was crowded with naked men, women and children, carrying calabashes filled with farina, baskets filled with biiju, and piki wrapped in leaves. Our phonograph kept them amused on their crossing over, but our presents to them interested them more. In the few hours that we stayed with them I tried to make as many notes as possible and collected a number of objects—work that was of no avail, for a few hours later everything was lost under fifty feet of water.

Y 622 554 Authority among the Anahukua did not exist. It was in vain that Aloike tried to impress us with his power; everyone behaved as he

[text continues on p. 136]

SP8 Bororo -
Waura SP18
Yaruma SP25

W
142
291
411
516
←
Y
142
291
302
864
→

FIGURE 1. MEHINAKU MEN AND BOYS

Y
142
291
302
482
←
142
291
302
411
→

FIGURE 2. TSUVA WOMEN

FIGURE 3. KUIKUTL WOMEN

FIGURE 4. KALAPALU MEN

[P. 135]

[Plate XI]

Bacairi SP7
Yaruma SP25
Waura SP18
Trumai SP23

Y
622 pleased. The women were as outspoken as the men, but it was noticed
554 that the younger women kept behind the older, peering over their shoul-
[562] ders, a custom that was observed among the Bororo and the Bakairi also.

Propelled by the outboard motor we covered a great distance, until
000 late in the afternoon three canoes were capsized by one of the men who lost his head. This occurred in one of the deepest pools in the river, and all our efforts to recover the canoes failed. Making an inventory of our resources we found that all of our dried meat was lost, most of the sugar, a good portion of the salt, beans, rice, and farina. For this last we were not concerned, for we could buy it from the Indians. More serious was the loss of most of the ammunition, some rifles, revolvers, knives, over half of our trade goods, including most of the hardware, the cameras, anthropometric instruments, Schick and Dick Test material, blood grouping sera, and all of my notes and specimens. We had lost enough beans and rice to last us some four weeks with care, and a sufficient quantity of coffee. I decided to go on anyway, but as a matter of fact we were not able to move in any direction, since the few small canoes would not carry all of the personnel.

On the second day after this event a Mehinaku appeared in a canoe with his wife and two children. Understanding our plight, he paddled to his people further down stream and the next day returned with men and canoes, having traveled day and night to reach us quickly. In the meantime the plane had flown by on its way to the meeting place, without having seen our smoke signals.

B Paddling all day and a good portion of the night, we arrived at the
W Mehinaku port of a village on the right bank, in the process of being
574 built. Farina and biiju were given us and we found the people delighted
609 and charming hosts. Putting up our hammocks under the trees, some
648 of us retired, but the Bakairi, though tired, sat up most of the night
197 conversing with the Mehinaku, though each other's language was mutu-
ally unintelligible.

On the opposite bank to the port of the Mehinaku, we found a group
T of about twenty-five Trumai men and women. They had no canoes,
142 but the Mehinaku ferried them across. They were exceptionally small,
146 being both short and thin, in contrast with other peoples that were met,
648 but always appeared to be well nourished. In the morning, when we

Waura SP18
Trumai SP23

T 142 146 648

distributed gifts among our hosts, the Mehinaku begged that we give gifts also to the Trumai, who were a poor but good people.

W 181

Of all the groups met, the Mehinaku were the most pleasant and the most reliable. The incident of helping us to move down stream has been mentioned. Later, on making contact with the plane, we had occasion to test their intelligence and reliability further. Eight cases of aviation gasoline had been left on the sand beach where the disaster occurred; as we needed the gasoline, six Mehinaku went back and brought it to us in remarkably short time. [Plate XI, 1.]

W 342 343 231

In the morning, while some of the canoes were being patched, I visited the new village. Though only one house had been built, and it was not quite finished, a tall conical structure made of poles tied together at the top, housed a harpy eagle. I was told that that was the first structure put up. The house structure differed in no way from others that were subsequently seen in other villages, which will be described later.

W 361 241

The original village of the Mehinaku was on the west bank, but having exhausted the soil, they were moving to the east bank. They had a few beans and maize seed, which they were carefully keeping for planting.

080

With the help of these kindly disposed and gentle Mehinaku, we continued our journey down stream, meeting with groups of Aura and Auiti, and finally arrived at the mouth of the Kuluseu. In the morning some Tsuva brought us the news that the plane was several bends of the river away, and we hastened to it.

Our meeting with Johnson, Rossi, Lorber, Saucedo and Due was a happy occasion for everyone. While waiting for me, news had come to them about some white men, but our failure to put in an appearance caused them worry. Their food supplies having been almost exhausted, they had decided to fly back to Cuyabá, when we appeared.

On the sand bank where the plane was beached there were collected Anahukua, Auiti, Aura, Kamayula, Yawalapiti, Tsuva, Kuikutl, and Kalapalu, and we brought Mehinaku. Each group was jealous of the others and we had to distribute our favors equally.

Learning that I had lost my photographic equipment, Arthur P. Rossi, who had made the trip with the plane merely to take aerial photographs of the region, insisted in staying with me when the plane flew back to Cuyabá the next morning, even though the plane would not return for three weeks to bring us fresh supplies of food. Rossi was a welcome

000 addition to our party. Two of our men, having become troublesome, were unceremoniously flown back to Cuyabá.

While waiting for our party, Johnson and Rossi had visited the Tsuva whose port is on the Kuluene river. This group has not been reported in any literature and was not on the Kuluene in 1920 when Major Ramiro Noronha descended that river.

492 Rossi and I with several Bakairi paid this village another visit, guided by the Tsuva that had come to see us. We took up the line of march, with two girls, carrying on their heads baskets in which were their hammocks, leading, and then I as the 'capitão,' the Tsuva, and the Bakairi, who brought up in the rear. The Tsuva men carried our baggage in their carrying baskets, which hung on the back from a thong drawn over the upper arms and across the chest. This method of carrying was preferred even by my Bakairi men. The women were never seen to carry these baskets, nor were they ever seen to carry loads in this fashion, preferring to carry everything on the head.

574 Due to the absence of the headman from the village there was no
609 ceremonial reception. Most of the people were in their huts, and those
that were not sought their cover. However, those that had accompanied
us soon made our peaceful mission known and we were asked to sit on
a log, placed in front of the men's house. Later the sub-headmen came
[262] to offer us the bird stools, and the women came with farina and a refresh-
[562] ing drink made from manioc. Again it was noticed that the younger
women stood behind the older when dealing with us.

Because of the absence of the headman we were not received in the men's house, but instead were shown to a half-finished residential house. The entire population paid us a call there, but there was no trading.

On my expressing the wish to visit the other houses, there were signs of protest, showing that since the headman was not there, that could not be done. On my insistence, finally the same young people that had guided us to the village took us into the houses.

531 In one of them, living in a compartment made of mats, we found a
[582] girl. It developed that she had married a Kamayula, who was now dead,
and she had escaped to her own people, who were keeping her in hiding.
She proved to be the most interesting person in the village, being the
local artist. The best basketry collected was made by her, the best ham-

Waura SP18
Yaruma SP25

Y
mock, and the mat shown in Plate XXIV, 4, and she decorated everything 531
that she made.

Y
One of the houses was half burned down. We were given to under- 622
stand that the headman had died and that the house had been subse- 768
quently burned down intentionally.

Y
There were four finished family houses, the half-burned house, half- 361
constructed house, the men's house, and the harpy eagle cage. The 161
population was under a hundred.

W
Our reception by the Yawalapiti was by far more ceremonial. When 574
near the village our guides shouted a number of times, and finally we 609
were met by a group of men who told us that the headmen were before
the men's house. We found there two men seated on a log smoking, [622]
surrounded by their men. The chief headman wore a diadem of jaguar [292]
hide. Both went to their huts and brought two bird stools, in which
Rossi and I were asked to sit. Calabashes containing manioc water, [352]
and biiju were offered then, and we in turn distributed a few gifts to [262]
everyone present. A number of long speeches were made back and
forth, but finally we were taken into the men's house, where we put up
our hammocks. In the meanwhile the women had formed in line, with W
arms linked and the palms of the hands held against each other with the [533]
fingers interlaced, and began a song in our honor. Later in the night
they entertained us in the same way.

W
In the morning we were awakened before sunrise by beautiful whist- 512
ling from many directions. It was explained that the young men were 515
leaving the village to hunt and fish. Everyone, even to the smallest child, 198
took a bath, though it was cold.

Later in the day we were entertained by two clowns, painted in black W
and red, and wearing nut-shell rattles on the right ankle, and playing 522
two sets of pan pipes, three in a set. The longest pipes were about five 534
feet long, and all were played in unison. The clowning consisted of 302
marching grotesquely from one hut to another, which was entered to the
sham fright of the women.

W
A more serious performance was given in the men's house. The per- 574
formers were three in number, apparently a specially designated group. 609
Each played a bass pipe shown in Plate XIX, 6. They arranged themselves 533
side by side, the middle man being the leader and wearing deer-hoof 535
rattles on his right ankle. They played in unison with some attempt at

Waura SP18
Yaruma SP25

W
574 harmony in short, staccato notes, at the same time marching stiff-legged
609 forward and backward. These flutes are kept hidden from the women,
[533] who though they know what they are, fear death as the penalty for
[534] actually seeing the instruments. The women also have a great deal to
[535] say about their disposition, for when I attempted to buy them, the men
[422] had to consult the women, who protested and claimed that without their
flutes their life would be joyless.

W In this Yawalapiti village the conical-shaped structure contained a
343 harpy eagle. Judging from the amount of bone material on the floor of
231 the cage, the bird is kept well supplied with food. In fact, each man
and boy must share whatever he obtains hunting or fishing with the
bird. In recompense he receives a feather at the periodic plucking of
the plumage. [Plate X, 1.]

W The Yawalapiti village was the one over which we had flown and
574 dropped the sack filled with trade goods. We were given to understand
609 that the women were so frightened that they even cast away the 'uluri'
123 as a sacrificial gesture. However, on finding our sack, they understood
that the aerial monster did not intend any harm to them, and so, thinking that we—gods perhaps—might have been offended at the warlike behavior of the men, they did not know what to do to have us visit the village again. We gathered that they prepared a great quantity of biiju, and at intervals the entire population of the village faced the south, the direction in which the plane had disappeared, and ceremonially called to us to come back to their village and share their hospitality. They had
W given up hope after several weeks. On our departure from this village
[152] the women and children set up a ceremonial wailing which we heard
for a long time afterwards as we paddled away in the lagoon. [Plate X, 1; XII, 4.]

000 Following our visit to the Yawalapiti, we broke our camp at the mouth of the Kuluseu to begin our journey up the Kuluene to the mouth of the Seventh of September river, where we intended to await the arrival of the plane which was to bring us fresh supplies.

Y On our way we encountered Tsuva, Kuikutl and Kalapalu at their
609 respective ports. We would find them amassed on the bank, with food for us and great curiosity. Many of them followed our canoes, so that upon reaching the mouth of the desired river and establishing our camp we found that several hundred aborigines had also slung their hammocks

in the same patch of forest. Generally three or four hammocks would 609
be arranged around a fire for warmth. [Plate IX, 3, 4.]

With Rossi and three Bakairi, two other trips were made. One was 114
the attempted ascent of the Seventh of September, but having gone some
distance and not discovering any signs of Indians, the project was abandoned. The other was a visit to the Naravute.

The usual march for several hours was necessary to reach the village 123
in the hot sun. Upon our sighting the village, our guide called out, and 574
did so at short intervals until, when we were almost in the village, his
calls became continuous, not stopping until we were in the clearing in 609
front of the men's house. Then the population began to come out of the
huts, led by the two headmen who brought not the customary bird stools, [231]
but stools of bark. The absence of the bird stools was significant, since [352]
the bird cage with its eagle was also missing.

Unquestionably we were shown more hospitality in this village than
in any other. The women brought great quantities of manioc water, a
very refreshing drink, and in every way demonstrated great joy at seeing [533]
us. Some of the women even linked arms and chanted one of their songs.

We were housed in a half-finished house because, it was explained to us, it was more comfortable than the men's house.

Great quantities of firewood, biiju, farina, and manioc farina were brought to every adult member of the group. Correspondingly, each one received some trinket or other from us, the children not being neglected in this respect.

Again we were awakened before sunrise, this time by a pounding and 512
the voice of a man who sounded as if he were chanting a sermon. My 577
Bakairi translated that he was exhorting the people to rise early and
bathe as did their ancestors, not to be lazy and lie in their hammocks, to [515]
begin the day's work, and so forth. In fact, the entire population filed to
the lagoon for its bath, and the pounding that we heard came from
women busy at work making farina. The harangue lasted about a half
hour, when things became quieter. The sun did not rise for an hour
afterwards.

Three roosters helped to awaken the day. Not having noticed them 648
the day before and knowing that our hosts had not been in touch with 231
any Brazilians except for Noronha's expedition in 1920, this was somewhat startling. We learned that they had been gotten from the Anahukua.

Yaruma SP25
Mato Grosso SP1

Y
648 where they had been left by an Inspectoria expedition several years
before that had gone to the relief of an American-English group, searching
231 for Col. P. H. Fawcett and his party, and who, believing that they
were in imminent danger of attack from the Kamayula and other tribes,
Y had radioed for help. However, there were no hens in the village.

Led by a young man, who we were given to understand held the office
535 of leading all dances, the men entered our hut and began to circle around
counter-clockwise, stamping the right foot. A group of women arm in
arm danced outside the circle, holding the palms of their hands against
Y each other with fingers interlocked, and chanting at the same time.
Their dance consisted of taking three steps forward beginning with the
[534] right foot, pausing and stepping back. No musical instruments were
used.

152
609
574 The ceremonial weeping at our departure was repeated at this village.

* * * *

M
114 As in the rest of Matto Grosso north of the sources of the Paraguay
river, ethnographical investigation of the peoples in the region under
discussion has not been carried very far. Most of the available information
is to be found in the reports of Von den Steinen and the studies of
Max Schmidt. In recent years the Inspectoria de Protecção aos Indios
has had several expeditions, but they have been concerned chiefly with
geography, and thus very little anthropological data can be gotten from
their reports.

I know of no published description of the peoples of the Kuluene
river. Major Ramiro Noronha descended and surveyed this river in
1920, and is well informed on the general culture of the Naravute,
Kalapalu, Kuiktl or Cuiruru, but has not published his data. The Tsuva
were, however, unknown to him. These tribes are not mentioned by
Von den Steinen.

Y
361 The approximate location of the villages of the peoples met on the
Kuluseu and the Kuluene are shown on the map. It will be noted
that they are grouped on the lower waters of both rivers, and that
the region between Simões Lopes and the village of the Anahukua is
uninhabited. Our canoes were made at the mouth of the Arame, and
from that point it took nine days of hard work in the rapids to reach
the port of the Anahukua. Major Noronha encountered no villages above

Aueto SP6
Yaruma SP25
Waura SP18
Trumai SP23
Bacairi SP7

Y
361

that of the Naravute on the Kuluene, where the rapids end. Thus habitation of the banks of these two rivers begins where the rapids end, and the rivers become deep and, in the case of the Kulene, broad. This seems the line likewise of the end of the open lands of the chapadão and the beginning of the forest belt that stretches northward to the Amazon. Thus the region occupied by the aborigines having permanent settlements is that which borders on deeper waters well stocked with large fish, where mammalian life is poorer, but bird life richer and the soil is better.

W
A
T
B
Y
197

According to Von den Steinen, the Mehinaku, Aura and Yawalapiti speak Arawak; the Auiti and Kamayula are Tupi, and the Bakairi and the Anahuka are Caribs. The Trumai speak an isolated language. Keeping this classification, we must include in the Carib stock Naravute, Kuikutl (Cuicura) and Tsuva, if the fact that these groups could converse freely with the Anahuka and that my Bakairi, who knew a little Anahuka, is an indication that they have a common language.

Thus, three of the four linguistic stocks of South America that have the widest geographic distribution are well represented on these headwaters of the Xingu. The fourth, the Tapuya,[1] is spoken by tribes in the surrounding region, most of whom are scarcely known by name. It is generally held that the Tapuya are the oldest inhabitants of eastern Brazil and that they were dislodged by the Tupi. In this region, it seems that the Tupi, Carib and Arawak are holding the more desirable locations near the rivers, and that all of them have as their common enemies tribes speaking some form of Tapuya, who are kept away from the deep waters and the fish. The most numerous are the Caribs, with five villages; the Tupi have two, and the Arawak have three. However, it must not be implied that because the villages speak languages which belong to the same stock that they are united politically. Each is a separate political community and apparently language affiliation plays little part in political or social alliances.

Y
361

Since Von den Steinen's visit, the tribes have shifted their habitat somewhat. Changes of village site is often caused by the necessity of fresh manioc fields, death or warfare. The Anahukua, for instance, gave the information that their former home was to the east of the Kuluene, but that following a disastrous attack by the Jaruma they

---

[1] [Tapuya means "enemy" in Tupi. Perhaps this fourth stock is Ge. —Analyst]

Yaruma SP25
Waura SP18
Bacairi SP7
Aueto SP6

Y
361 moved to the Kuluseu. A comparison of the map with that of Von den Steinen will reveal that a number of changes have been made.

B Formerly the four Bakairi villages were to be found below the Taunay
Y falls, being the first habitations that were encountered on descending
W the Kuluseu. These have now been abandoned, and the Bakairi peoples,
361 including those of the Rio Novo who are almost extinct, have withdrawn
131 to the Inspectoria's post on the Paranatinga. Thus, the first people to be met are the Anahukua, whose village is on the right bank, in about the same location as that given by Von den Steinen. Several days of paddling downstream is the port of the Mehinaku, on the left bank, and the village is as usual several hours' march away from the bank. This also is in the approximate location given by Von den Steinen. At the time of our visit, however, the Mehinaku were busily building a village on the right bank. Their fields were ready, the eagle house was built with the eagle in possession, and one house was almost completed. The reason given for the movement eastward was that there was necessity of seeking better fields. Another Arawak people, the Aura, also have a port on the west bank of the Kuluseu, below that of the Mehinaku, but their village must be close to the Batovy. A group of them that came to visit our camp came by way of the Batovy and Kuluene.

W Below the mouth of the Kuluseu there is a lagoon and buritizal on
A which are located three villages. The southernmost is that of the Auiti,
131 a Tupi people, who have in addition a port on the Kuluseu. Next to
361 them to the north are the Yawalapiti, who are Arawak, and close to the mouth are the Kamayula, also Tupi, a numerous and much-feared people. Fishing in the lagoon is restricted to members of each group within certain limits.

Y The Kuluene river up to the rapids is in possession of Carib peoples.
361 Just below the rapids are the Naravute, and then going northward are met the Kalapalu, the Kuikutl (Cuicuru) and the Tsuva, all having
648 their villages on the west bank. These groups are in constant warfare with the Tapuya-speaking people that wander over the territory east of the Kuluene, and sweep westward, but to the south of the Naravute and Anahukua. It would seem that the Tapuya peoples actually surround the other peoples of different linguistic stocks that have more permanent settlement.

Trumai SP23
Bacairi SP7
Yaruma SP25

T 101 361 648 [50]]

The Trumai were met on the west bank of the Kuluseu, between the Anahukua and Mehinaku ports. They had no canoes. We learned that their village was close to the Batovy. It would seem that they also have shifted their village site since Von den Steinen's encounter with them.

All of these people live at peace with each other, though of course quarrels arose at times. Their common enemies are, however, the tribes living to the east and west, tribes that roam across the headwaters and depend on hunting rather than fishing for food.

B 101 829

The Bakairi gave the following list of tribes that are supposed to live in the forests east of the Kuluene: Kayahó (Kayapó); Kaviji; Turi; Marifitava; Phoi, who are pygmies, a little over a metre high; Penehoko, who are a very large people; Tsuyakadi, who also are very large; Yaruma; Suya; Tsuruna; and, on the Paranatinga, the Tonali, who are also known as Kayahi, Kajabi; Apiakala (Apiaka) and the Pana, who are a very tall people.

Y 101 829 648

The Kalapalu gave the names of the following tribes who are supposed to live to the east of the Kuluene and with whom they are permanently in a state of war: lower part of Kuluene, the Siuya (Suya) and Tsuruna (Juruna); directly to the east of their village, the Ahinkotl, Turi, Juruma, Tumbilyaka, Kayapo (big feet) Alitsowa, Aiiva, Yahã, Ravine, Aruga (hide away to kill people), Yarpitau (kill people), Tahulgi (pygmies). [See map, Plate XXV.]

Y B 648

Our attempt to meet some of these tribes that are supposed to have their villages close to the banks of the Seventh of September river was not successful. In view of the above linguistic grouping of the tribes, it is interesting to note their attitude toward each other. The Bakairi, who are Caribs, distrust and fear the Anahukua, who are of the same linguistic stock, affirming to me again and again that they are a bad people. They were relieved when we left their neighborhood. On the other hand they praised the Mehinaku, and were not even afraid to leave their goods about. The Mehinaku are Arawaks. My canoemen were also at ease with the Aura and the Yawalapiti, and seemed to expect nothing from the Trumai, whom they considered an inferior and poor people. The Auiti were watched with suspicion, but the Kamayula were actually feared, as well as the Tsuva, Kuikutl and Kalapalu, the first being Tupi and the last three Caribs; but the Paravute were praised for their honesty and peaceful disposition, and seemed to recognize in the Bakairi,

Bacairi SP7
Yaruma SP25

Y
B
648
[609]

kinsmen. One of my Bakairi was treated as a headman, loaded with presents and made to lead a dance, taking the place of the master of ceremonies, by these people.

The Mehinaku were in fear of all the tribes but the Aura and Yawalapiti, who are also Arawaks. The Kamayula and especially the Kuikutl were feared by all.

Y
123
648
439
177

In our contact with these tribes, the fears of the Bakairi and the Mehinaku seemed to be somewhat justified, though at no time did we clash with any group. Disputes sometimes arose, springing from the difficulty of making our mutual requests understood, but we were able to settle everything amicably. At one time we were warned that the Kamayala were lying in wait for us, having resented our failure to visit their village, which was due to my inability to walk at the time. However, on passing the place where they were supposed to be in ambush, we were not molested. We were told that, having waited for us several days, their food supplies had been exhausted, and that they had gone to their village for food. The Kuikutl were a little troublesome, being somewhat arrogant, yet several of their men performed excellent and quiet service, for the axes and knives that were given them. All of the tribes met have been very little affected by the outside world; in fact, the only articles that we saw not of their own manufacture were a few nails which had been converted into arrow points. Thus, in our dealings with them we had to depend entirely on trade goods. Knives were wanted and prized by all, but axes were not wanted. Fish hooks of all sizes, and fishing lines were wanted and given to everyone. Clothing was wanted as a protection from the insects, but we were not supplied with it. Necklaces came next in importance as trade goods. Other objects were taken, but not with the same enthusiasm as the ones mentioned.

Y
171
105

In the region under discussion, three of the most widely disseminated linguistic stocks are represented, and yet no appreciable differences in their material culture were discovered in the field. An examination of the collections that have been brought back has resulted in verifying the first impression.

All are a fishing people, and the methods employed are common to all; manioc is the other food staple, and the associated traits in the cultivation and preparation of it are found in every village; the houses are constructed in the same manner; the bows and arrows used are

Bacairi
Yaruma SP25

Y 171 105

monotonously similar; pottery, basketry, musical instruments, body ornament, all conform to the same general pattern. Thus in speaking of their material culture, the description of that of one village applies to all, with the possible reservation of small, unimportant local developments or omissions.

The mode of life and the dependency on the environment doubtlessly is responsible for the unity of culture. The rivers are the highways, with canoes traveling up and down, its occupants in search of fish. Meetings between groups of individuals belonging to two different villages are more apt to be cordial, especially since one may be in need of food which the other has. Inter-marriage is frequent and the interchange of goods is carried on extensively. In fact, in most cases it is impossible to be certain as to which village made a particular specimen.

Y 105 361 342 171

The villages are composed of a few houses arranged around a clearing, where the men's house and the cage for the eagle are built. The houses are exceptionally large and well built, and are occupied by a number of related families. Each house has its headman. [Plate X, 1.]

The houses are not arranged in any well-defined manner, thus the village does not have the appearance of being well planned as one of the Bororo.

Y 105 171 342

Each house has two doors placed at the middle of each side opposite each other. The door opening on the side of the house away from the clearing is used mostly by the women, the back yard being used for the preparation of manioc bread, or farina, and so forth. The houses are built with light grass-thatched walls, which afford good protection against cold and rain.

Y [342]

There is some difference in the care with which a house is built. Of those seen, the Naravute seemed to have them more fastidiously constructed.

The ground plan is in the form of an ellipse, about ten metres in width and twenty in length. About five metres from each end and in the center the three main posts are set deep into the ground. They are about twenty centimetres in diameter and stand about eight metres above the ground. A ridge pole is lashed on top. A wall one and a half metres in height is made of posts of approximately the same thickness as the main posts, set about fifteen centimetres apart. Then long, thinner poles are lashed to these posts, their tops bent inward so as to meet, and

[text continues on p. 149]

3:Petrullo E-5 (1931)1932

SP8 Bororo
Waura SP18
Yaruma SP25

W
252
415
516
←

W
142
241
301
302
516
595
854
→

FIGURE 2. YAWALAPITI WOMEN PREPARING MANIOC FARINA

FIGURE 4. YAWALAPITI POLYGENOUS FAMILY

W
252
516
412
417
←

Y
252
415
516

FIGURE 1. YAWALAPITI WOMAN POUNDING MANIOC

FIGURE 3. [illegible] MAKING BEIJU

[P. 148]

[Plate XII]

lashed together. To keep them secure they are lashed to the other poles Y 105
running transversely, and heavier short poles are lashed to the ridge 171
pole, resting on and lashed to the bent poles which form a sort of false 342
roof. The entire structure is then covered by a sort of light framework
of lashed horizontal pieces and is thatched with grass, leaving an opening
between the false roof and the ridge pole as a smoke hole. The ends
of the ridge pole are prolonged and thatched decoratively. [Plate X,
2-4.]

The inside of the house contains a central platform on which valuables, Y
such as farina, basketry, and so forth, are kept. Each family has its own 342
corner taken up by the hammocks, implements, and valuables, and its 353
fireplace built close to the hammocks for warmth during the cold nights. 105
There are no compartments except when a birth takes place, when a 171
section is screened off by woven mats. 592

The entire community shares in the building of a house, which takes Y
many months. The women do the lighter work, but the actual building 342
is in the hands of the men and boys. 476

The central posts are often decorated with geometric designs, which Y
are often colored in red and black. No special significance seems to be 105
attached to them, but this must be taken with caution, since the lack of 171
proper interpreters made the investigation of symbolism in art an 342
impossibility. [531]

Some of the houses seen, those that were constructed poorly and were
smaller, such as the men's house, contained only two central posts. The W
Yawalapiti men's house had no doors. [342]

The men's house, outside of being relatively poorly constructed and Y
smaller, has a ground plan that is closer to the circular. The inside is 105
empty of all furniture, except that two logs running lengthwise to the 171
house are placed a little raised from the ground against the main posts. 345
On these logs the men sit when at work or watching some performance. [352]
It is in this house that the sacred flutes which must not be seen by women
are played. For this reason Von den Steinen refers to such a house as
the flute-house.

Though it is used as a meeting place of the men, and the women are excluded from it, it is not the living quarters of the men as it is among the Bororo. The boys and the men live in the family houses, sleeping, eating, working and loafing there. This house is reserved for ceremonies

Bacairi: SP7
Yaruma SP25
Waura SP18

Y
185
181
345 and for guests. Generally, outside and in front of the house there is a log
8 on which newly come visitors sit, until the bird stools are brought.

Y On our visit to the Tauva we saw the charred framework of a house,
768 and upon inquiring about it, we were informed that on the death of one
of the inmates of the house it burned down. The Bakairi confirmed the
existence of this custom among their people.

Y The fields are situated close to the village and are always cleared forest
105 land. The trees are burned down, sometimes cut down and burned, as
171 well as the underbrush. The ashes give greater fertility to the soil. The
241 manioc cuttings are then planted. The men do, as usual, the heavy work,
the women helping as much as they can.

Most of the groups cultivate nothing but the bitter manioc or cassava,
but a few of them have maize and sweet potatoes, neither of which are
W [243] extensively cultivated. The Arawak groups seem to be better and more
[244] interested husbandmen. The Mehinaku had maize seed and sweet potatoes. The Yawalapiti had maize.

W Of interest are the maize effigies which were seen in the houses of the
532 Yawalapiti and Mehinaku. One ear of maize is embellished with legs,
243 arms, a skirt and a painted visage. These figures are hung from the
rafters of the roof. Some of them, instead of representing human beings,
are made in the likeness of birds. Several of these effigies are in the
collections of the University Museum.

Y The crops are transported to the village in 'carrying baskets.' The
105 framework of these baskets is of wicker, consisting of an elliptical loop
171 for the bottom, and similar loops lashed to it and to each other forming
482 the sides. Each loop is filled in with a network of bark strips. These
415 baskets are made in all sizes, some of the larger ones measuring over a
metre in length. It is carried on the back, with a tumpline, also made
of bark fiber, across the chest and upper arms. This method leaves the
arms and hands free, while the load needs no balancing. No women,
however, were ever seen carrying a load in this manner, preferring to
carry on the head, a method utilized also by the men. [Plate XI, 2-1.]

Y When the manioc is brought to the village it is first grated to a mass.
105 The grater is a board with piranha teeth inserted into it or bits of shell.
171 In order to extract the juice, which is poisonous, this manioc mass is
252 squeezed between the hands or sometimes in wicker mats. It then is
put out in the sun to dry in the form of cakes. If not for immediate use,

Bacairi SP7
Yaruma SP25

Y
these cakes are packed in large carrying baskets, carefully covered with 105
leaves and stored away. [Plate XII, 1, 2, 3.] 171
Some of the grated manioc is made into farina, by sifting it through 252
a basket sieve and baking it in a flat pottery pan. In this form it will
keep indefinitely. If biiju is to be made, the grated manioc is sifted, but
instead of baking it so as to dry it in small particles, it is spread out in Y.
the pan to form a sort of thin cake. This is the form in which most of [484]
the manioc is eaten. The biiju cakes keep for several days, and always
form part of the traveller's baggage. Y
A non-intoxicating but nevertheless refreshing drink is made by 105
mixing the unbaked grated and sifted manioc with water. This is the 171
drink offered the visitors, on arrival at the village, by the women. It is 272
served in large half gourds. Y
Depending almost entirely on fish and manioc for food, great quanti- 105
ties of both are eaten, and eaten continuously. The women begin 171
making biiju before sunrise, so that those setting out to fish will be able 262
to take it along.
In connection with the making of biiju fire, fans made from strips of [372]
palm leaves, or sometimes of grass, are used. To smooth out and turn [412]
the biiju cakes, wooden spatules are in use, generally made to suggest Y
the representation of a snake or a bird. 105
In the food quest, besides the cultivation of manioc, fishing occupies 171
the attention of the men. Though the women assist by steering the canoe 226
and paddling, not one of them was ever seen actually fishing, though [501]
the Bakairi informed me that the women are capable of it. [462]
Shooting the fish with bow and arrow is the most common method.
It is never done from the banks or by wading in, except in the rapids.
The man doing the shooting stands up at the bow of the canoe while his
companion, who may be his wife, perhaps with a baby at the breast at
the same time, gently paddles, keeping the canoe close to the bank.
To learn to shoot fish is not easy, since both the force with which the
arrow is driven into the water, its deflection upon striking the water,
the motion of the canoe, and the movements of the quarry must be
gauged. The bow is held upright, the arrow in position but the string B
relaxed until the game is seen. In case of a miss, the arrow floating on [105
the surface of the water is retrieved with the end of the bow, the arrow 171
being caught between it and the string. No opportunity of getting fish 226]

[text continues on p. 153]

3:Petrullo E-5 (1931)1932

SP8 Bororo
Wauara SP18
Yaruma SP25

W 226 501 ← Y 142 302 →

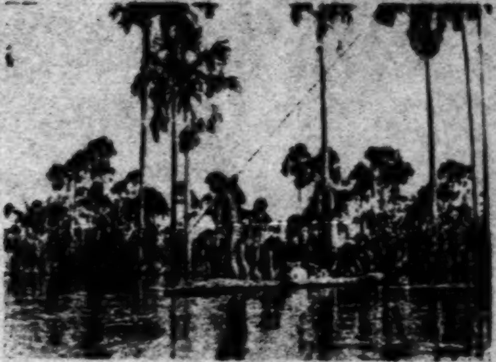


Figure 1. Mehinaku Spearing Fish

Y 226 501 ← Y 142 302 →

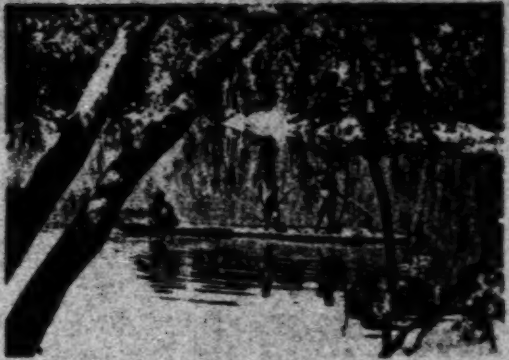


Figure 2. Kalapalu Shooting Fish

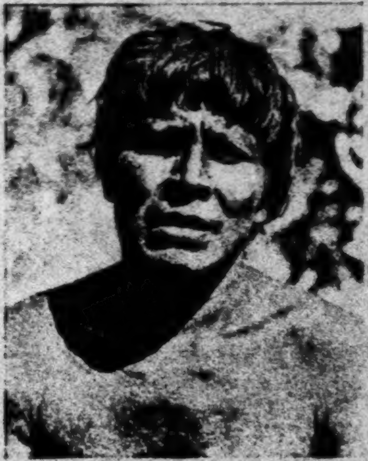


Figure 3. Kalapalu Man

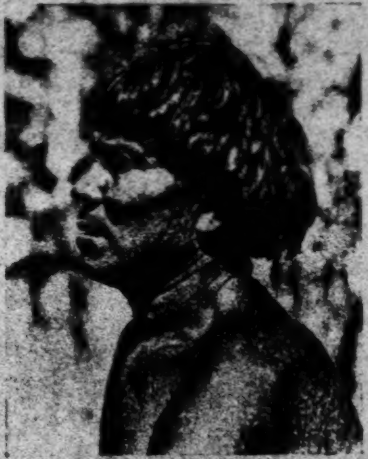


Figure 4. Profile

[P. 152]

[Plate XIII]

Bacairi SP7
Yaruma SP25

Y
is ever lost. Our Bakairi were imbued with the same spirit, for often Ba
the paddle would be dropped and replaced with bow and arrow though 226
we may not have needed the extra food. This anxiety to gather as much 105
food as is encountered was also manifested in the case of turtle eggs 171
found in the sand banks. For those days that we travelled, each canoe [202]
at the end of the day would have gathered at least thirty or forty eggs.
This food was shared generously with everyone. [Plate XIII, 2.]

Another method of fishing was with a spear. Especially in the dry
season, the fish withdraw to the deep pools where it is impossible to
reach them with an arrow. A spear is usually made of two sections: a Y
wooden shaft with a large conical bone point and a reed extension to the [411]
shaft. Both sections measure about seven metres in length. [Plate
XIII, 1.]

Damming of the lagoons is resorted to. A dip net with a handle Y
about three metres long is in use, and drag nets are apparently used in [227]
season.

Fish is eaten almost raw; the only method of cooking seen was Y
barbecuing, either by placing it on a platform over a fire or by placing 105
it on a framework close to the fire. Salt is unknown and not liked, as 171
evidenced when they were asked to try our food, when though hungry, 252
none would accept it if it had been seasoned with salt. [263]

Another food in usage, highly prized and carefully stored away is the Y
fruit piki, which grows wild. The fruit is boiled in the large earthen
pots, placed in cylindrical bark containers, about one and half metres 105
to two metres in length and a third of a metre in diameter, sealed tight 171
at both ends, and placed under water in some cool pool. These bark 251
containers are reinforced with wooden slats. On ceremonial occasions 415
they are opened and a quantity sufficient for the immediate needs is
taken out to be distributed to every member of the village equally. It
is mixed with water and drunk, without fermentation. Both the
Yawalapiti and Naravute had these bark containers.

Pottery

Y
Pottery is poorly developed in the region. Neither in quantity nor Bo
variety, nor in technical perfection does it compare with that of the 105
Bororo. The forms are simple though characteristic. 171
323

[text continues on p.155]

3:Petrullo E-5 (1931)1932

SP8 Bororo
Waura SP18
Yaruma SP25

Y
142
302

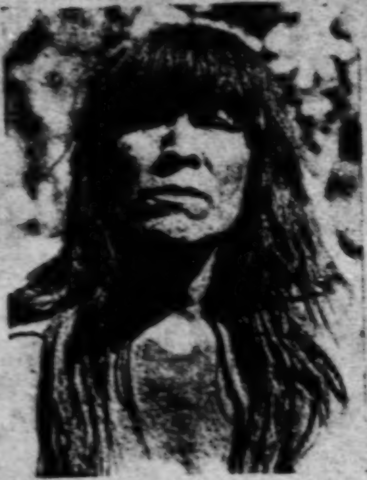


FIGURE 1. ANAHUKUA WOMAN

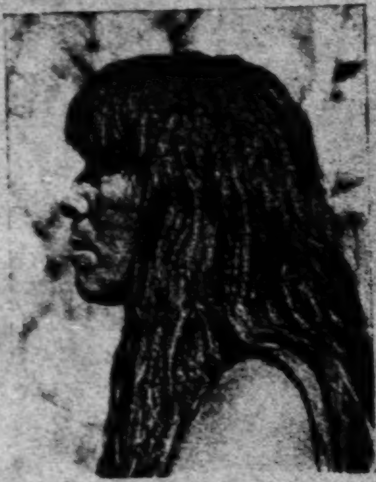


FIGURE 2. PROFILE

W
142
291
302

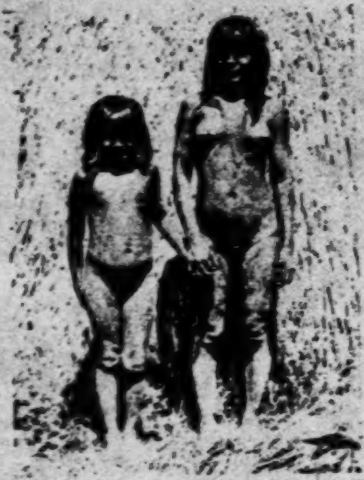


FIGURE 3. YAWALAPITI GIRLS

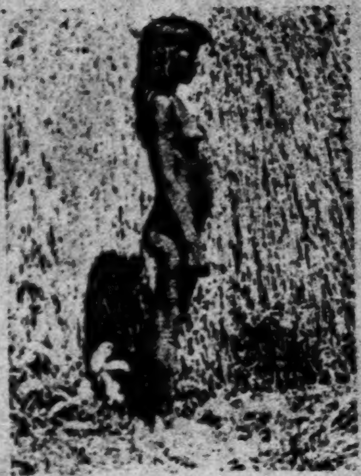


FIGURE 4. PROFILE OF YAWALAPITI GIRL

[P. 154]

[Plate XIV]

Bacairi SP7
Yaruma SP25

Y
105
171
323
[317]

The absence of good clay perhaps is responsible for the poorness of the industry, for tribes of the same linguistic stock in other parts make good pottery.

The most common form has a circular base and a turned out rim. The sides are thick, and the pots are disproportionately heavy. The clay fires black. In many cases the outside of the pot is painted. The top of the out-turned rim often bears simple incised designs, such as are seen on Plate XX, 12. These pots are used in the preparation of manioc farina and in boiling piki. To the Bakairi they were so valuable that they begged to be permitted to take several of them back to Simões Lopes. [Plate XII, 2.]

B
[323]
[439]

Smaller pots are made, sometimes with different shaped rims, such as were collected by Von den Steinen. They are comparatively rare and do not seem to have much importance in the culture. A great many of the pots are traded from the tribes further north.

Y
[439]

Other Receptacles

Y
105
171
415

However, good substitutes for pottery have been found in calabashes and gourds, which are obtained in almost any quantity and are of any desired size. They further have the advantage of being light and do not break easily. They can be made to serve as bottles, dishes, cups, spoons, and every other kind of receptacle, by cutting off a section of the neck, or a section on the side, or by splitting in two along the neck to the base. The inner surface is charred and often decorated with painted red dot designs, the most common of which is a cross made by the crossing of two sets of two parallel lines of dots. Some of the other typical designs are shown in Plate XXIII. The outside of the receptacles are also often decorated—never with red dots, but always with linear painted geometric patterns. A few are also shown in the same Plate.

Y
[322]
[531]

A great variety of basketry exists, being made in many shapes, utilizing divers weaves, and are used for many purposes. The carrying basket has been described. Another common type is a circular flat bottomed basket of hexagonal weave. It is of especial interest since this type can be duplicated in Oceania, Africa and other regions. For temporary purposes, a basket is quickly made from a single palm leaf by braiding the leaflets together. A number of intricate weaves are known producing interesting basketry designs. [Plate XXI.]

Y
105
171
285

Bacairi
Suya SP21
Waura SP8
Yaruma SP25

Y 105 171 285 Grass, palm leaves, and splints, are used in making basketry. Some of the baskets are reinforced and decorated with interwoven cotton thread.

Bows [Plate XXII, 8-14]

Y 105 171 411 The bows are uniformly large, only those of the Aura showing a slight comparative smallness. One bow collected from the Naravute measures 262 centimetres in length.

S [411] In cross section, the most common is the slightly ovoid; the round bow appears, but is less common, and one of rectangular cross section with rounded corners that was collected was said to have been made by the Suya.

With the tension of the string released, the bows are almost straight. The Suya bow mentioned is curved outwardly at both ends.

Y [285] [284] None of the bows are reinforced even by lashing. The string is made of fiber or of buriti leaf strands. Part of it is wound about the middle of the bow, serving as a reserve should the string break in drawing the bow.

Bo 411 The Bororo bows show greater specialization and higher technique. They are smaller, somewhat flattened, and highly decorated according to the membership of the owner in one of the clans. Colbachini has given a good description of these.

The pellet bow, similar in almost every feature to one collected by Max Schmidt from the Guató, was collected from the Bororo.

Fish Spears

W. 411 A number of spears, used to transfix fish found in deep clear pools, were collected from the Yawalapiti-Mehinaku. A Mehinaku with a Yawalapiti wife was first seen using one, and later a number were collected in the Yawalapiti village.

The spear consists of a long wooden shaft, pointed at both ends. One end receives a large bone conical barbed point; the other a long reed extension of the shaft, used only when the depth of the pool is greater than the length of the wooden shaft. The total length of the spear, including the point and the reed extension, is over six metres.

W 226 Most of the fishing is done in lagoons or bayous which contained many deep pools. The water is generally crystal clear, so that the hundreds of fish swimming about close to the bottom can be as easily seen as in

Waura SP18
Bacairi
Suya SP21
Yaruma SP25

W
226

one of our city aquariums. The fisherman stands up in the bow of his canoe, while perhaps his wife is doing the paddling and steering, and after having chosen his fish, he lets down the spear into the water until the point is close to the fish, and then with a quick thrust impales it. The fish are a large size, and will struggle violently. Often it becomes necessary for the man to dive overboard holding on to his spear, and the battle is continued in the water until the fish becomes exhausted. This is attended with much laughter and jesting by the onlookers and by the fisherman himself.

Arrows [Plate XXII, 1-6, 16-20]

Y
105
171
411

Proportionately with the large bows used in the region of the Kuleseu and Kuluene rivers, the arrows are long and thick, measuring up to two metres in length. The arrow consists of a point of bone, wood and in a few cases of iron, a foreshaft of wood, a reed shaft and feathering and lashings which are usually functional but sometimes merely decorative.

Y
[237]

Using the points as criteria, they can be classified as follows: 1. A bone acuminated point set on the foreshaft diagonally so as to form a barb, being bound to it by fiber string and cemented with wax. 2. Bone conical acuminted point set on the foreshaft, with a concave base, the points of which form two barbs, held on the shaft by wax cement. 3. The same as 1, but the bone point has been substituted by one of iron, made from the ordinary iron nail. Those arrows that are feathered show the sewed technique, the two feathers being but slightly spiralling. Almost all of them have a feather decorated butt, which is also reinforced by fiber lashing. The reed shaft is likewise thus reinforced, especially where the foreshaft and shaft meet. The wax used to cement the points on to the foreshaft is used on some as a decoration, always on the foreshaft. The length of the foreshaft is about one-quarter that of the seed shaft. The knobbed arrow was not seen.

Y
[237]
[531]

The University Museum possesses several specimens of whistling arrows. These are feathered, but lack the point and foreshaft. In the place of a point there is a tucum nut shell, with slits cut out on its sides. When the arrow is shot a whistling sound is produced. These are used only in play. [Plate XXII, 6.]

Y
[524]

Only one arrow with a bamboo blade was collected, and it was claimed that it was a Suya arrow, a tribe that was not met by our party.

S
411

[text continues on p. 159]

Yaruma SP25

142
302

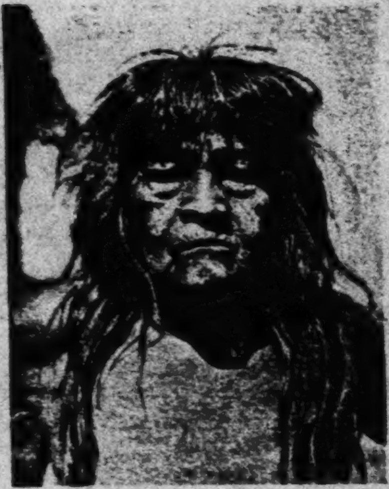


FIGURE 1. TSUVA WOMAN·

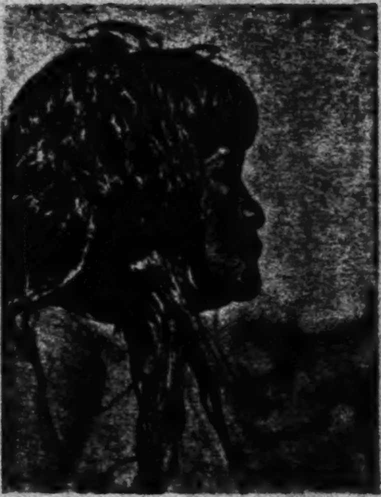


FIGURE 2. PROFILE

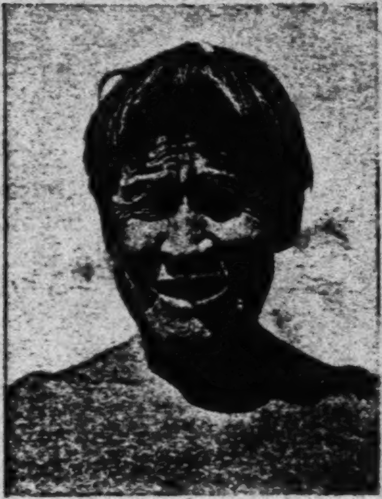


FIGURE 3. TSUVA MAN

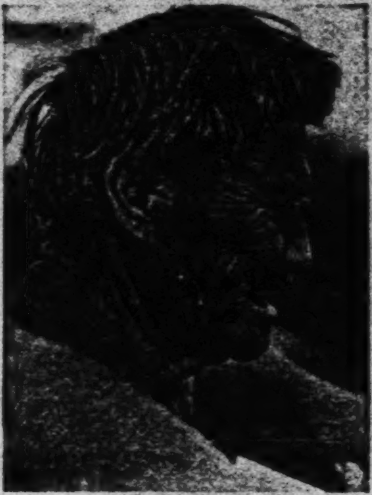


FIGURE 4. PROFILE

[P. 158]

[Plate XV]

Bacaini
Yaruma SP25

Bo
411

The Bororo arrows show more specilization and difference in technique. They are smaller, in keeping with the smaller bows, with a finer reed and wooden foreshaft. Of the bone points, only the conical points made from the humerus of some mammal is in use. Even this point is smaller and better made than the Kulueu-Kuluene. The feathering is also quite different. The feathers, spiralled, are lashed to the shaft, not sewed.

The feathers are trimmed on both sides, but unlike the Kuluseu-Kuluene type, not to the midrib on one side. The inner surfaces of the feathers are toward the shaft and each other.

Sometimes the foreshaft has many miniature barbs, and in one case the foreshaft has been serrated on two sides.

Often the bone point is lacking, its place being taken by an accuminated foreshaft.

Bamboo blades on the jaguar and war arrows are common and of two types—a flat wide blade, and a narrow grooved one.

Spears and Throwing Sticks

Y
411
105
171

A number of throwing-sticks were collected, all conforming to the same type. Only one shows decorations, which consists of a basket sheath. A wooden peg is lashed to the end of the stick, serving to receive the butt of the spear. The spear is thrown in the following manner: the tip of the index finger is inserted in the hole just above the hand grasp, the arm is pulled back and the spear thrown without guiding it with the fingers.

Y
[526]

The 'spears' consist of a reed with a heavy knob at the end, which consists often of a piece of wood covered with wax, or some heavy object. The butt is not notched. Many of the spears are inserted in a tucum nut shell with slits in it so that a whistling sound is produced when the spear is thrown. These spears are used only in a game, which consists of two parties lining up facing each other at a good distance and throwing the spears at each other. The goal is to hit one of the other party.

It seems that the function of the throwing stick with a true spear, such as is used in the Chaco for hunting and war, has been forgotten by these people. In the forest such a method of hunting would not be practicable. [Plate XXIV, 3.]

Bacairi SP7
Yaruma SP25

Y 105 171 352

Seats

In front of the men's houses a log is usually kept, on which the men sit, and which guests occupy until bird stools, or in the case of the Naravute, bark stools are brought by the headmen of the village.

Y [345]

In the houses the hammocks take the place of stools or mats, except when biiju is being prepared by the women. In the men's house there are two parallel logs running almost its entire length, lashed to the main posts.

Y [285] [531]

In the villages, sitting on the ground is avoided whenever possible. Mats, made of lengths of taquora, held together by two strings passed through holes in the individual pieces, are used. Such a mat is shown in Plate XXIV, 4. Often the upper surface is decorated with incised rectilinear geometric patterns, as shown in the sketch. These mats are especially used when making farina or biiju.

The bark stools seen among the Naravute which were brought to us, as the guests, in place of the bird stools, consist merely of a piece of bark about thirty centimetres long, bent inward and lengthwise. They bear no decorations of any kind.

Y [231] [532]

The bird stools are of the type shown in Plate XXIV, 10, 11. They are carved from one piece of wood, the head of the bird and the tail being easily recognized, although the style is extremely simple. The bird represented is the harpy eagle. and is in some way connected with the keeping of the bird in the cage in the village as described.

Y [574] [622]

Of the bark and bird stools there are but a few in the village, owned only by the headmen, and are used on those occasions when visitors arrive at the village.

Y 516 [501]

In the canoes the occupants sit on sticks placed crosswise on the bottom. The paddlers hold the legs straight before them, or bent, but never under them.

When not sitting on stools, hammocks or mats, the men squat. The women double the legs under them as seen in Plate XII, 3. When standing they frequently lean on each other's shoulders, and also employ the crane's posture [Plate XII. 4].

BA

Musical Instruments

Y 534 105 171

Pan's pipes are known to all of the peoples on the Kuluseu and Kuluene rivers, including the Bakairi. One type consists of five reeds

Bacairi SP7
Yaruma SP25
Waura SP18

of different lengths, closed at one end. Two or three of the pipes are Ba
played in unison. Though the intervals between the lowest note and Y
the next two in the scale are well defined, there seems to be but a very 105
slight difference, if any at all, in the pitch of the notes produced by the 171
shorter pipes. This type is used for practicing the music and for personal 534
amusement, but not in ceremonies. They are easily made and are carried
about frequently. Though different sets may be pitched differently,
the note intervals seem to be the same, at least in the three sets that
are in the University Museum collection, though they were collected
from the Bakairi, the Naravute and the Kalapalu. [Plate XIX, 7.]

In the Yawalapiti village, the two clowns used pipes made of bamboo. W
Instead of five, they consisted of three pieces, the longest of which 522
measured over one and a half metres. The three notes produced, though
different in pitch, corresponded to the three lowest notes produced on 534
the pipes described above. In this particular ceremony, each of the 533
men in turn played what may be called the lead part, while the other
played the accompaniment.

Single end-blown flutes, such as are illustrated in Plate XIX, 6, are Ba
common to the entire area. They were seen in the Tsuva, Yawalapiti, Y
and Naravute village, and apparently were known to the Bakairi and to 534
peoples of the other villages. They are made of taquara, and to be 105
played they must be well soaked in water. The upper part is so cut out 171
that when the flute is played the chin rests on it. At the other end,
there is a narrow aperture. Four holes control the pitch of the notes. Y
It was noted that the note intervals were the same as those of the Pan's Ba
pipes. They are used strictly in the ceremonies, and the sight of them [784
is prohibited to the women, death being feared for failure to observe 562]
the tabu. However, not only are the women permitted to listen to them,
but they are listened to with great pleasure. It was the women that
prohibited the men to sell them to us in the Tsuva village, and in the W
Yawalapiti village, the women pretended to weep when it was decided [425
to let us have them. Three flutes are played together in the ceremony. 562
Both the flutes and the office of playing them in the ceremonies seem 152]
to be inherited.

Another flute, smaller than the above mentioned, was obtained at the W
Yawalapiti village; it differs from the others in that close to the top 534

[text continues on p. 163]

Yaruma SP25

142
302

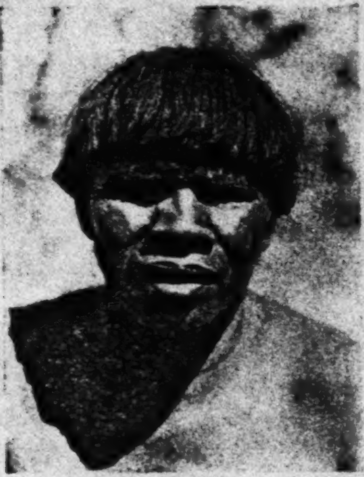


Figure 1. Kuikutl Man

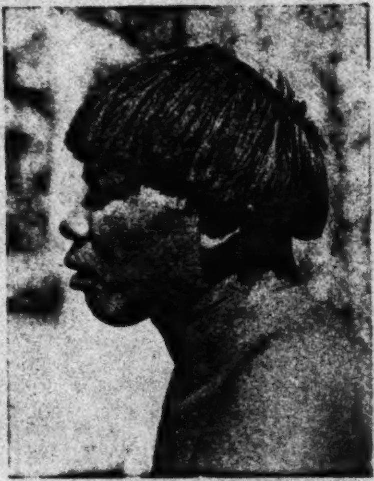


Figure 2. Profile

[301]

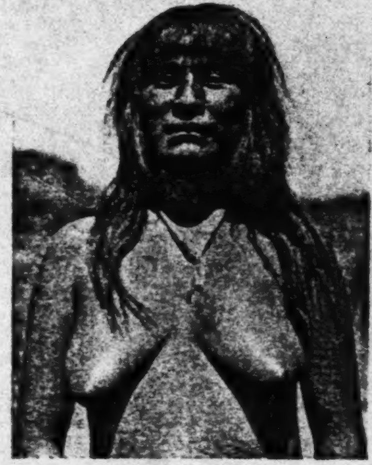


Figure 3. Náravute Woman

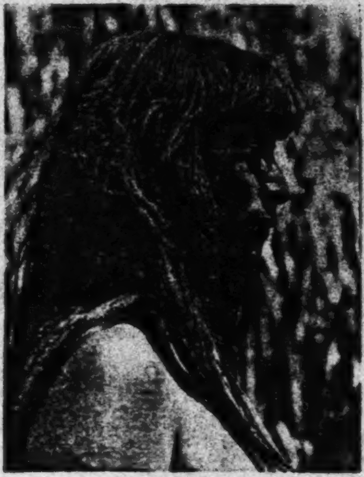


Figure 4. Profile

[P. 167]

[Plate XVI]

there is a small aperture for blowing. This type need not be wet to W 534
play. [Plate XIX, 8.]

The only other object that might be called a musical instrument, that Y
was seen in use, was composed of a number of nut shells joined together 534
by a string and worn by the dance leader on the right ankle. In the 105
dance, the beat is always accentuated by the stamping of the right foot 171
and these rattles help to make it more pronounced. 535

Gourd rattles were collected from the Bakairi, and they informed Ba
me of the existence among them of the bull roarer, which is tabu to the 534
women, but neither of these were seen among the other peoples of the 784
Kuluseu-Kuluene area. 171

The men were never heard to sing. In the ceremonies that are accom- Y
panied with singing, the women take that part, generally accompanying
it with a dance, consisting of linking arms with the palms of the hands 105
against each other and the fingers interlaced, and taking three steps 171
forward and three backward, leading with the right foot. While travel- 533
ing, the women were heard to sing softly to themselves, and apparently 484
the repertoire is a large one.

Other Ceremonial Objects

The use of stools, flutes, and rattles, in connection with ceremonies Y 105
has been noted. Although no ceremonies other than those described in 171
the narrative were observed, a number of ceremonial objects were 796
collected which show interesting features.

One of the Naruvute masks consists of a piece of knotless netting Y
with two splint rings sewed at the upper portion to represent the eyes, 532
and with a painted geometric design in black and red to suggest the face. 796
When worn, the net falls over the face and breast, and is kept in place
by a string that is tied about the waist, and another about the head.

A Yawalapiti mask consists of a tightly woven piece of cloth, ovoid W
in shape, bearing a painted design in black and white, suggesting the 532
face. Grass is attached to it on every side, so that when the mask is worn, 796
the grass falls to the knees.

Another Yawalapiti specimen consists of a conical shaped hat with grass attached to the sides, so that it falls over the face and neck to the shoulders.

Y
532 The headdress shown in Plate XXIV, 8, was collected from the Nara-
796 vute, but similar objects were seen in the Tsuva and Yawalapiti village.
W It consists of a gourd painted with geometric figures, in black and white,
532 with wicker and grass attachments.
796 Woven splint diadems were found in every village. Generally they
Y bear geometric designs in black. A specimen from the Naravute is
292 encircled by a band of feather mosaic. These diadems are worn by the
535 leaders in the dance.

Miscellaneous

Y
412 Combs are made of splints held in place by cotton string woven in
with them. A Yawalapiti specimen is shown in Plate XXIV, 1. The splints
are further lashed together by transverse pieces of bamboo. A string
Y wrapping hides the woven designs on the body of the comb.
249 Tobacco is not cultivated, but some wild form is smoked in the form
276 of cigars, though not to any extent. It is dried and kept in wicker mats.
Y Fire-making is avoided as much as possible. In the villages, the fires
372 are kept smouldering when not in use. On canoe trips, fire is carried
484 in the stern, both for heat in the early morning, and also to cook the
fish that are caught.

Y Nordenskiold differentiates two types of drilling appliances found in
use in South America, both based on the principle of rubbing wood on
372 wood. Type A, 'a wooden stick is twirled in a hole in another stick,
171 and where a narrow groove more or less marked on one side leads down
to the tinder, which is placed underneath the stick'; type B, 'a wooden
stick, usually an arrow shaft is drilled into a slab of bamboo or wood,
which is pierced whereby glowing particles of powdered wood, produced
by the friction, drop down on the tinder.'

B The first method was seen employed by the Bororo and also by the
[372] native Brazilian 'woodsmen' of Matto Grosso. The second method, that
of piercing, was found among the Kuluseu-Kulurne aborigines. The
appliance consisted of four or five small pieces of bamboo or other reed,
tied together on a plane and held by one man in place on the ground.
A small hole is made on the upper stick so as to receive the drill which
is a long reed, twirled rapidly between the palms by another individual.
In this manner the drill pierced all of the sticks in succession to the

Yaruma SP25

very bottom, when the hot powdered woody particles fell on tinder which 372
was fanned to a blaze. Fire was made in about a minute by this method. 171

Clothing and Decoration of the Body

If by clothing we mean any object worn on the body for protection 291
against the inclemency of the weather, or to cover the genital parts, 105
either from a sense of social modesty, or for protection of a practical
or magical kind, the peoples under discussion are absolutely naked; but 171
if our definition for clothing should include the habitual wearing of anything on the body, then we can classify these people among those that are partly clothed.

Rarely is a man seen without a waist string. Those who sometimes dispense with it are the old. It may consist of merely a cotton or bark fiber string, or a roll of such strings, or a string of seed beads or perforated shell discs. Whatever it may be, it is tied in front. Among the peoples of the Kuluene the ends are allowed to fall over the genitals, but no really serious attempt is made to keep them covered. However, it seems that a sense of shame is connected with its wearing. The following incident illustrates the point.

At a time when I was bartering for specimens, with some fifty men, women and children about, I asked for such a waist band. Though I offered to buy one for an exceptional price, no man appeared to be willing to part with this article. On adding still more objects to what already had been offered, one man offered to give it to me on the morrow. On my insisting that he give it up then, he did so with the greatest reluctance. Immediately laughter and cries of derision were directed at him, especially by the women. He withdrew with apparent shame, but reappeared a few minutes later with his composure regained. He had gone to the nearby trees, gotten some bark fiber and had made out of it a band which he was wearing. It was accepted as a substitute, and he was let alone.

In addition to this band, the men often wear cotton bands at the
ankles, at the knee, sometimes only below it and sometimes covering 301
the knee. Similar bands, or feather bands are worn on the forearms 105
and wrists, and the young men, especially those who are not married, 171
wear feather ear ornaments, which consist of a stick adorned with bril-

[text continues on p. 167]

Yaruma SP25

142
302

[301]
←

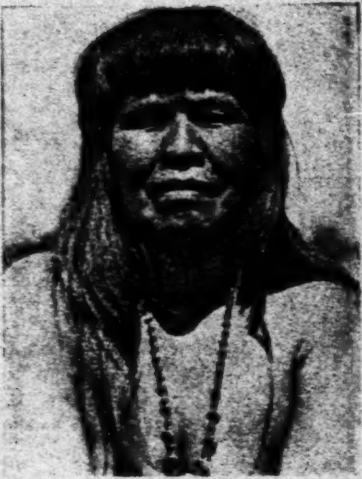


FIGURE 1. NARAVUTE WOMAN

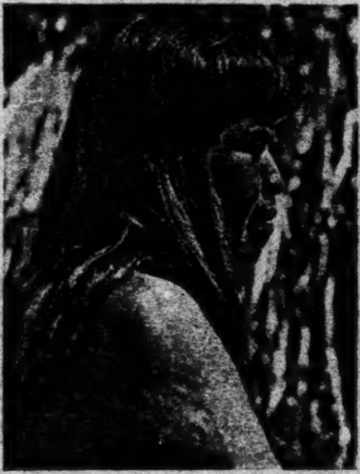


FIGURE 2. PROFILE

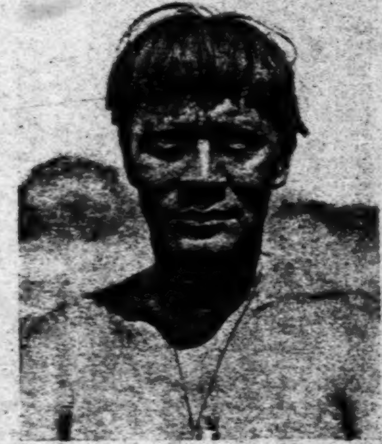


FIGURE 3. NARAVUTE HEADMAN

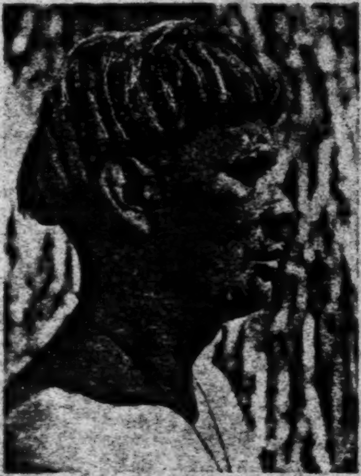


FIGURE 4. PROFILE

[P. 166]

[Plate XVII]

Yaruma SP25

liant down, generally of the macaw, inserted in a hole in the lobe of Y
the ear. One Anahukua headman wore a headband of cotton, and one 105
of the Yawalapiti headmen wore a diadem of jaguar skin, but these are 171
the only occasions when a man was seen wearing any kind of head ornament, 301
except in the ceremonial dances. In addition, some of the men,
if they have them, wear necklaces of puma or jaguar claws, or a seed
necklace or mussel shells, but ornaments of this sort are more often
worn by the children, and not the adults.

In place of the waist band, the women wear the 'uluri.' This consists Y
of a square piece of taquara cortex, folded ingeniously in the form of a 105
triangle to one of the points of which is tied a thin string. Another 171
string passes between the folds of the uluri. When worn, the triangular 291
piece rests on the mons veneris and is held in place by one string that
is worn about the loins. The other string passes between the labia
majora, and is hooked behind on the loin string. Before puberty the
girls wear merely the loin string, but once having assumed the uluri it
is never taken off. No decoration was seen on the uluri.

The women do not wear any bands about the arms or legs, the only Y
exception to this being in the case of the girl during the puberty initiatory 105
period, when her legs are bound tightly below the knee and the ankles 171
(Naravute) for a period of two months. Some wear necklaces of shell, 301
though not if they have children, for then such articles as may be
possessed are given to them, or to the men.

Body painting is practiced by both sexes, more by the tribes living Y
on the Kuluseu than those living on the Kuluene. Since this happens 105
to be coincident with the fact that the insects are less bothersome on the 171
Kuluene, there is a suggestion that such painting is practiced as a protection 302
and not for magical reasons, as Von den Steinen points out. Most 825
commonly used is urucum which is put on the entire body in a thick
layer, even to covering the hair. Piki oil is likewise used, and carried Y
along always. That this last is undoubtedly used for insect protection [484]
is well supported by the fact that it is generally put on the back where
the insects become more annoying to the paddler, since he cannot easily
brush them off, even when using a twig with leaves dipped in the stream
for that purpose. Often the canoes stop and its occupants share this oil
with one another, whether they belong to the same village or not, generously
painting each other's backs with it.

Yaruma SP25
Bacairi SP7
Waura SP18

Y During the trip, at various times, a number of men were seen that
302 were covered completely with soot. However, it could not be ascertained
105 for what reason this was done. By my Bakairi, several explanations
171 were given: that the man had been working in clearing the fields, or that
he had partaken in some ceremony and the soot had not as yet worn
off, or that he had put it on for caprice.

The women often covered the forehead and the face down to the cheekbones with a thick layer of urucum. The children also were often so painted. This seemed to be purely for aesthetic reasons. The men never did it, and it was practiced more often by the young women. It was evidently done with a great deal of pride and pleasure, the mothers finding especial delight in painting the children in that manner every morning.

B One of my Bakairi, whose original home had been on the Rio Novo,
302 one morning appeared with the identical facial painting, but instead of
751 using urucum, he had used soot. On my inquiring about it, he said he
177 had done it to protect his eyes from the glare, but on being pressed he
gave me the impression that there were other reasons. The anxiety of
the Bakairi to appear devoid of practices which are not European
undoubtedly prevented getting the real reason. Soon after our conversation he wiped it off.

W. The Mehinaku and Yawalapiti women bore three painted parallel
302 lines on the wrists, on the forearm, and on the cheek. One of them was
532 actually tattooed in this manner. One Mehinaku living with the Naravute
304 bore painted geometric designs on the legs, too indistinct, however, to
reproduce.

Y There is no doubt that body painting for decoration is practiced widely
302 and whenever the mood comes upon the woman. In the case of the
105 men, they bear no painting other than the ordinary urucum protective
171 coating except when they take part in some ceremony. The paint is not
washed off afterwards, but remains on the body until it wears off.

The universal style of wearing the hair among the men is to cut it evenly around the head, following a line a little above the eyebrows. In addition, the crown is shaven. This latter practice, like the wearing of the waistband, is abandoned by the old men sometimes.

The women cut the hair across the forehead, but let the rest grow long and wear it loose.

Bacairi SP7
Yaruma SP25

The heads of the boys before arriving at puberty are often shaven, Y [881]
but the girls wear the hair in the same style as the older women until 302
puberty, when the hair is not cut and must be worn over the face until 105
after the end of the initiatory period [Plate XII, 3, 4]. 171

Body hair, especially of the genital parts, is pulled out by both sexes.
Hair of the legs and arms is not pulled out unless it is unusually thick,
but the trunk, the armpits, the face, receive careful attention. For this
purpose a spiny grass is used. In contrast with the Bororo, the eyebrows Bo [302]
are not taken off.

With the exception of ear piercing, which is performed on the boys, Y
no other type of body mutilation is practiced, though the use of piranha- 105
teeth scrapers to draw the evil out of the body in case of sickness, done 171
by the individual himself, often leaves marks on the body. This is done 304
also to alleviate itching. [755]

Filing the upper teeth is limited to the Bakairi, who file the upper
front teeth to a point. Ba 304

* * * *

Each village is composed of a number of houses, generally about five, Y
with a headman to each. The heads of households are interrelated, 105
often being brothers. In each household a number of families live 171
together, each having its own possessions, and its own section of the hut. 621
Such a household generally consists of the headman and his wife, his [592]
unmarried children and the married females with their husbands and [591]
children. The young man goes to live in the house of his wife's father,
but when he is capable of it he may build his own house.

There is a nominal head to the village. His authority, however, is Y [622]
limited to the ceremonial; in other things he is more of a counsellor than
a leader.

The women are actually the authoritative persons in the village. Y
Succession and inheritance is traced through them, and though the 105
stranger deals with the men, they consult their women in everything and 171
refuse to do anything unless the women are compliant. Often the women 562
are openly more aggressive than the men. 621

Marriage takes place soon after the puberty initiations, which both Y
boys and girls have to undergo. For the girl, the initiation consists in 881
having her legs bound in the manner already described, covering the body [582]

[text continues on p. 171]

142
302

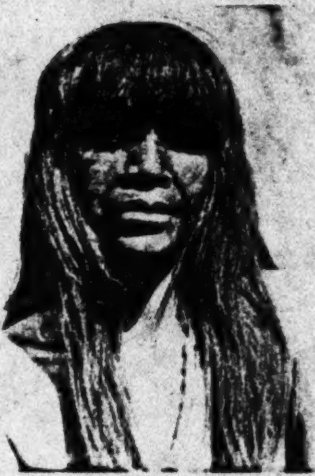


Figure 1. Naravute Woman

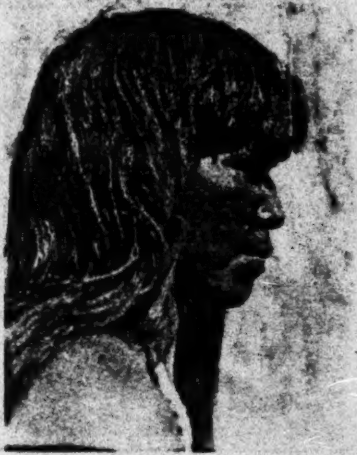


Figure 2. Profile

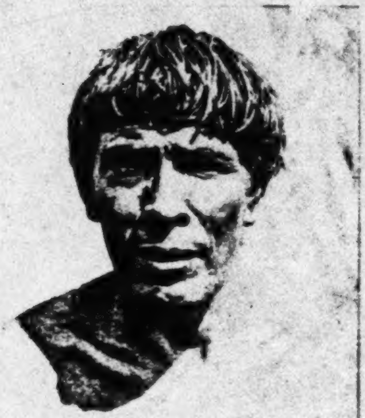


Figure 3. Naravute Man

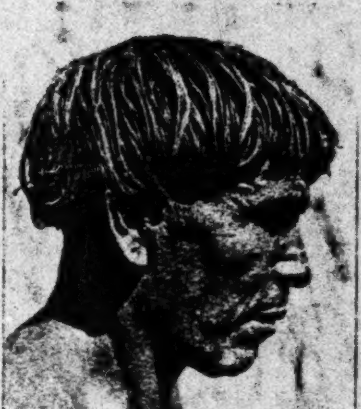


Figure 4. Profile

[P.170]

[Plate XVIII]

Yaruma SP25
Bacairi SP7

with ashes, letting the hair grow long and over the face, and keeping away Y
from the sight of men. During this period she is taught by the old women 881
the various duties that fall to the lot of women. Everyone in the village,
men and women, feels a responsibility toward her, and watch her
development with sympathetic interest. Numerous gifts are made to her
so that she may become more desirable to the men. The boys undergo
a corresponding ceremony, but very little data was obtained concerning it.

Y
The method of seeking a girl in marriage seems to be as follows: 584
After the man has given the girl's parents some presents, and has received 591
some encouragement from the girl, at nightfall he goes to her house and 171
hangs his hammock below hers. They sleep that way that night. On the 105
following day, if the girl accepts the proposal she hangs her hammock below his. That being a sign that she has accepted, they cohabit that night, and are accepted as man and wife by the community. They live with the girl's parents until the man is ready to build a house of his own. Probably there are other ceremonial performances to be gone through, but a marriage not having been witnessed, no more information was had on this point.

Y
For the boys, marriage occurs later, since often there are no girls in 105
that community or a friendly community available for marriage. Some- 171
times it is the male who is lacking, and in that case the girl fares badly. 582
However, in most of the marriages the couple seemed to be of about 721
the same age. Only among the Bakairi did I note that several of my B
young canoemen were married to much older women. Lack of marriage- [582]
able women in a community often brings about a raid on another community. In the Tsuva village I found a girl hidden away in one of the houses in a special compartment. She refused to go outside. It developed that she had been married to a Kamayalua, had had a son by him who was then living with her, while the husband had died. Having no protectors in the tribe she ran away to her own people, but was kept in hiding lest the Kamayalua learn of her whereabouts and attack the village.

The usual form of marriage is monogamous. It is a purely practical Y
custom. The middle-aged men, and the headmen often have two wives, 595
but only if they can support that number and the children that may 105
come from that union. A second wife is desired principally for the sake 171

Yaruma SP25
Waura SP18

Y
105 of children. Infant mortality is high, and only a few of one's children
171 survive. Thus the headman of the Naravute had had nine children by
595 his first wife, but all of them had died. With the consent of his wife,
[165] with whom he has continued to live in a most lovable companionship,
he married another woman, by whom he has had children that have
survived.

In such cases of polygamy there is no sexual jealousy between the wives. It was the wife of the Naravute headman who told of the loss of her nine children, and then pointed with pride and pleasure to another woman nursing one child and with several others about her, and told us that she was the second wife of her husband. The first wife remains at the head of the household, the second wife occupying a less important position, the relationship being more like that of mother and daughter.

Y Children are the most prized possession of the parents, and they are
105 dedicated to them with such complete abandon that it is hardly conceiv-
171 able unless one is in their company. The child is nursed by the mother
858 until it reaches three or four years of age. Food and ornaments are
[853] always for the children first. All of the men and women that received
objects from us in exchange for their hospitality gave most of them
immediately to the children. Their health is guarded assiduously, as is
W evidenced by the custom of the couvade. One of the Mehinaku that
[846] accompanied us had a son about two months old. During the entire
period that he was with us, six weeks, he refused to eat anything but
black pirnaha and biiju. Everything that he received from us he put
Y away for 'pili,' his baby, or asked us to keep it for him lest the others
[846] take it away from him. Likewise the Anahukua headman kept strictly
to a black piranha diet, lest the baby sicken and die.

Y Not once did I see any adult scolding a child. As a matter of fact,
105 not once did I note any violent altercation among the adults themselves.
171 On the other hand, I noted no case when a child deserved to be scolded.
861 They were full of fun, and obedient. There was no organized play for
[578] the children, but the adults, both men and women, played with them.
On their side, they helped the adults, especially in the food quest. The
W first Mehinaku that we met followed us with his wife and his young baby
[222] and little girl of perhaps five. The little maiden spent a good portion
[593] of the day gleefully gathering turtle eggs on the sand bank, hand in hand
with her mother carrying the baby, being taught where to look for nests.

The education of the children is taken in hand by the respective sexes in things that pertain to them. Thus the making of biiju is taught by the women, but the making of arrows and bows by the men. 105 868 171

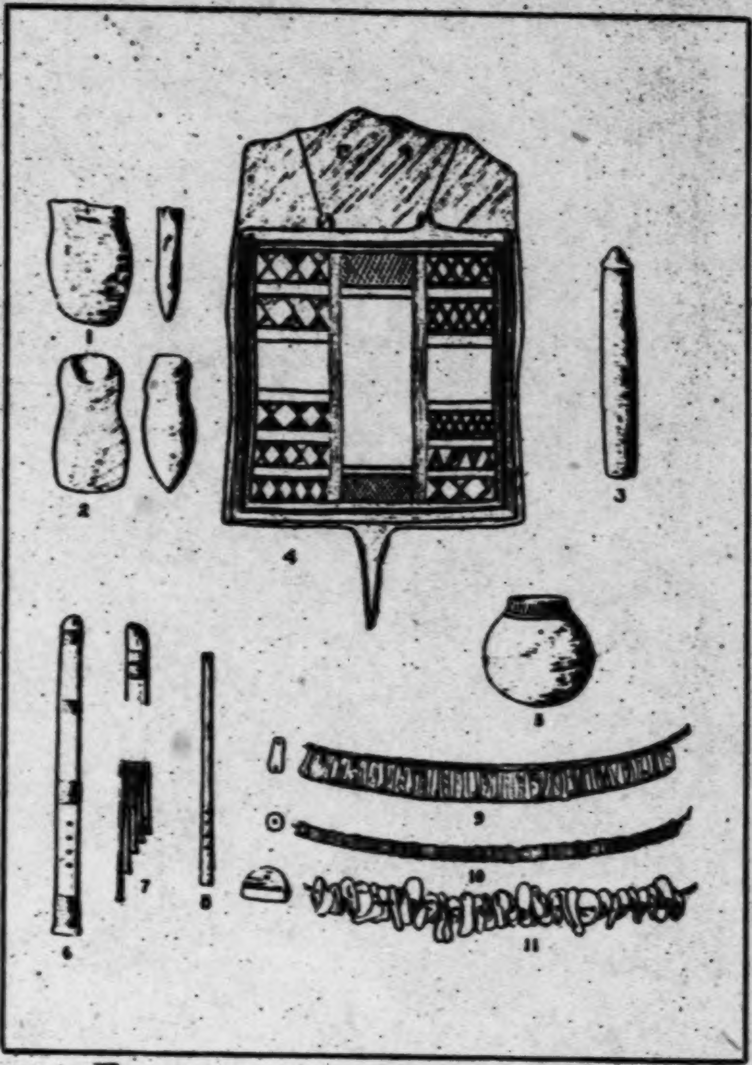
Labor between the sexes is as evenly divided as their physical powers permit. Roughly, the heavy work is done by the men, with the women assisting, and the light work is done by the women, with the men assisting. The men clear the manioc fields, while the women see to it that they are supplied with food; the women do the planting, but the men aid constantly, and it is the same way with gathering. The making of farina—the grating and squeezing out of the juice—and the making of biiju is taken care of by the women; but the gathering of wood, the packing of the farina for storing, the making of the baskets, and other occupations are taken care of by the men. Fishing is a man's job, as is whatever hunting is done, but the women assist by steering the canoe and doing the light paddling. When actually travelling, the man always paddles in the stern, and the woman never paddles if there are two men in the canoe. When travelling afoot, the loads are shared by the men and the women in proportion to their physical powers. In short, men and women and children mutually help one another in any undertaking. 462 105 171

Yaruma SP25
Mato Grosso SP1

PLATE XIX

MB
172
B
531
595

Y
105
171
534
301

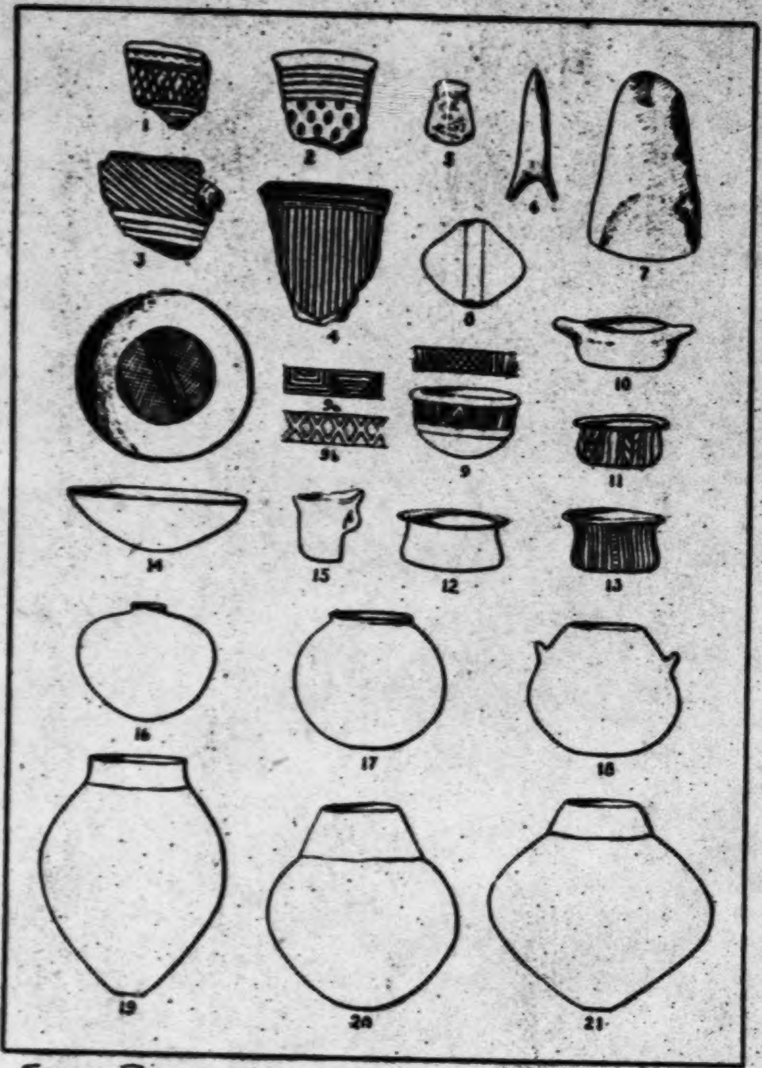


[P. 174]

[for captions, see cat. 116, p. 82—Analyst]

Mato Grosso SP1

Yaruma SP25 PLATE XX


1
2
5
6
7
3
4
8
10
9a
9b
9
11
14
15
12
13
16
17
18
19
20
21

B
M
172

B
415
411

Y
415
105
171
531

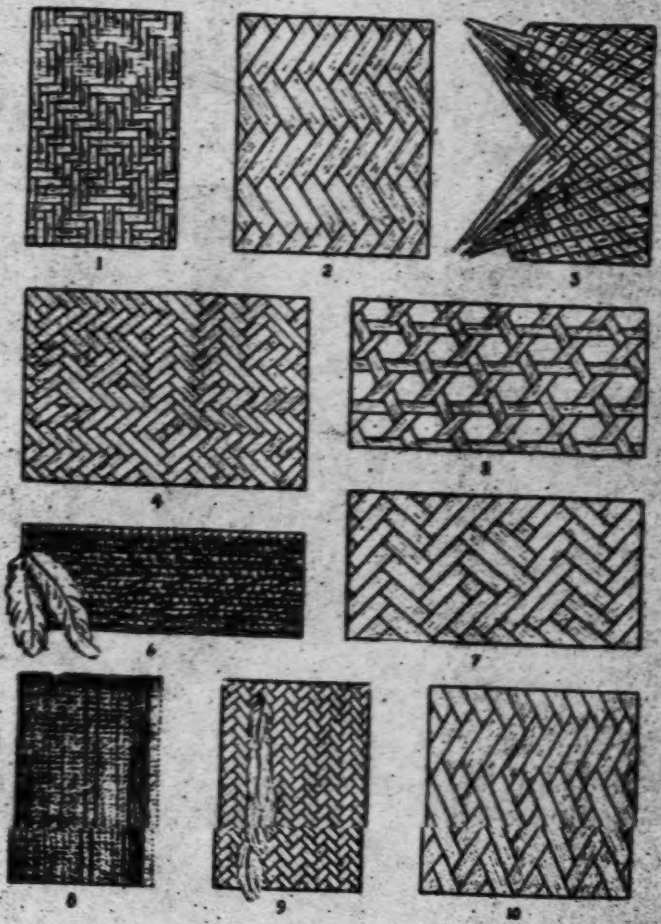
[P. 175]

[for captions, see cat. 116, pp. 87-88. —
Analyst]

YARUMA SP25

PLATE XXI

Y
105
171
285


1
2
3
4
5
6
7
8
9
10

Y
[237]

B
237
285

[P.176]

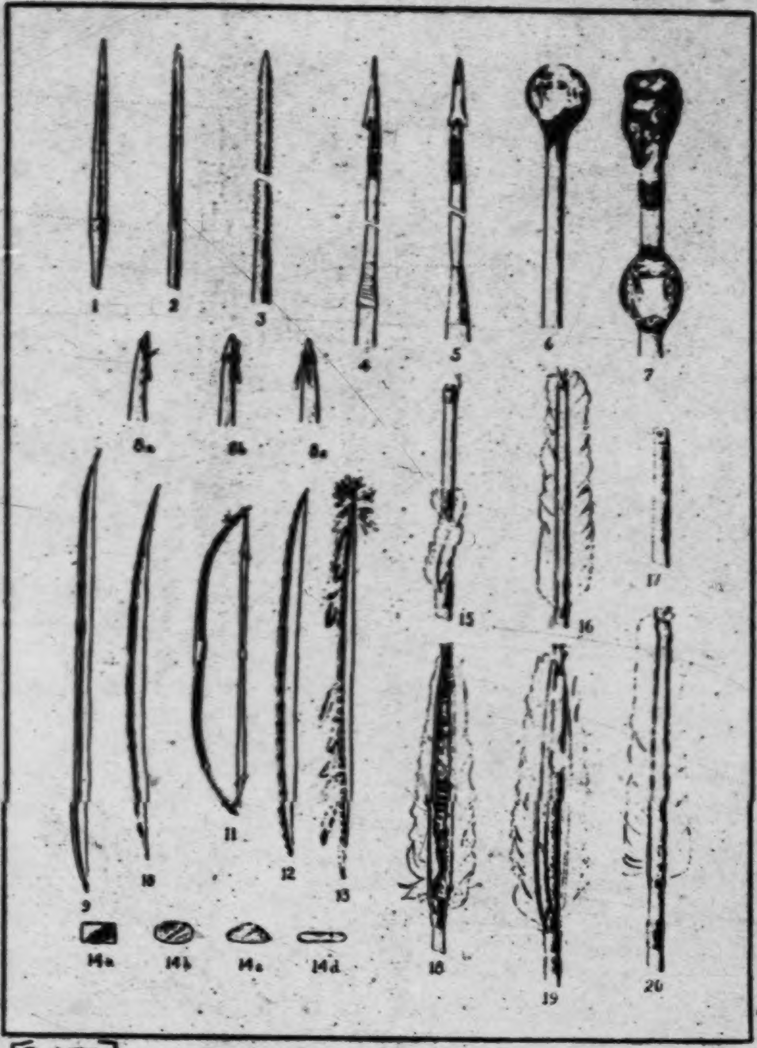
[for captions, see cat. 116, p. 88]

3:Petrullo E-5 (1931)1932 **SP8 Bororo SP8**

Yaruma SP25

Waura SP18

PLATE XXII


1
2
3
4
5
6
7
8a
8b
8c
9
10
11
12
13
14a
14b
14c
14d
15
16
17
18
19
20

Y
105
171
411
524
284

B
[237]
[531]
[411]
W
[284]
[411]

[P. 177]

[for captions, see cat. 116, pp 88-89]

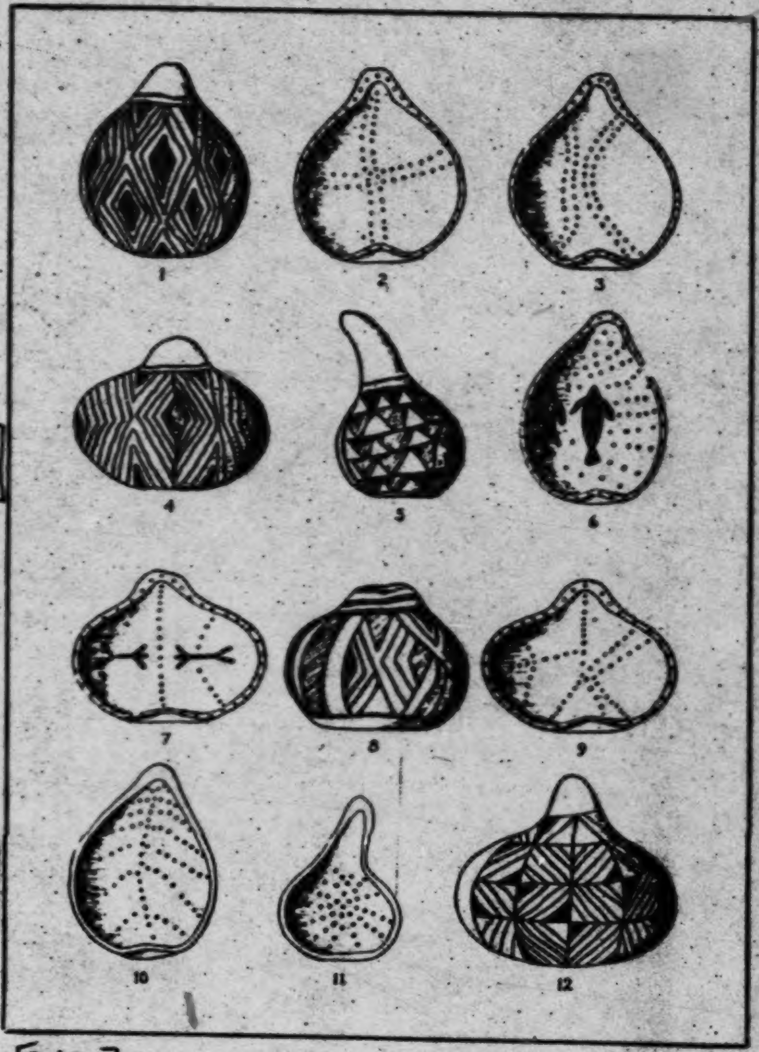
Bacairi SP7
Yaruma SP25
Waura SP18

PLATE XXIII

Y
105
171
415
531

B
[415
[531]

W.
[415
[531]

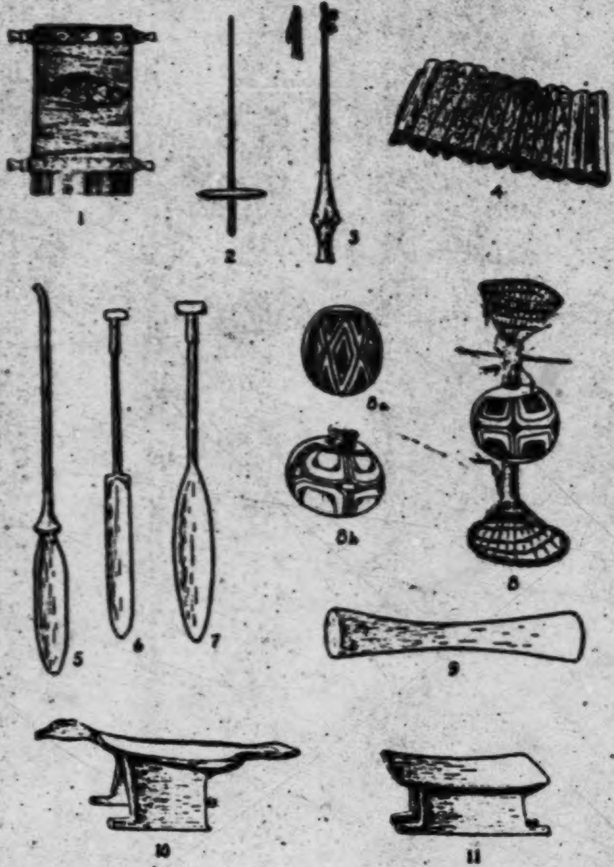

1
2
3
4
5
6
7
8
9
10
11
12

[P. 178]

[for captions, see cat. 116, p. 89.]

SP8 Bororo
Bacairi SP7
Waura SP18
Yaruma SP25

PLATE XXIV


1
2
3
4
5
6
7
8a
8b
8
9
10
11

Y
105
171
352
534
501
283
292

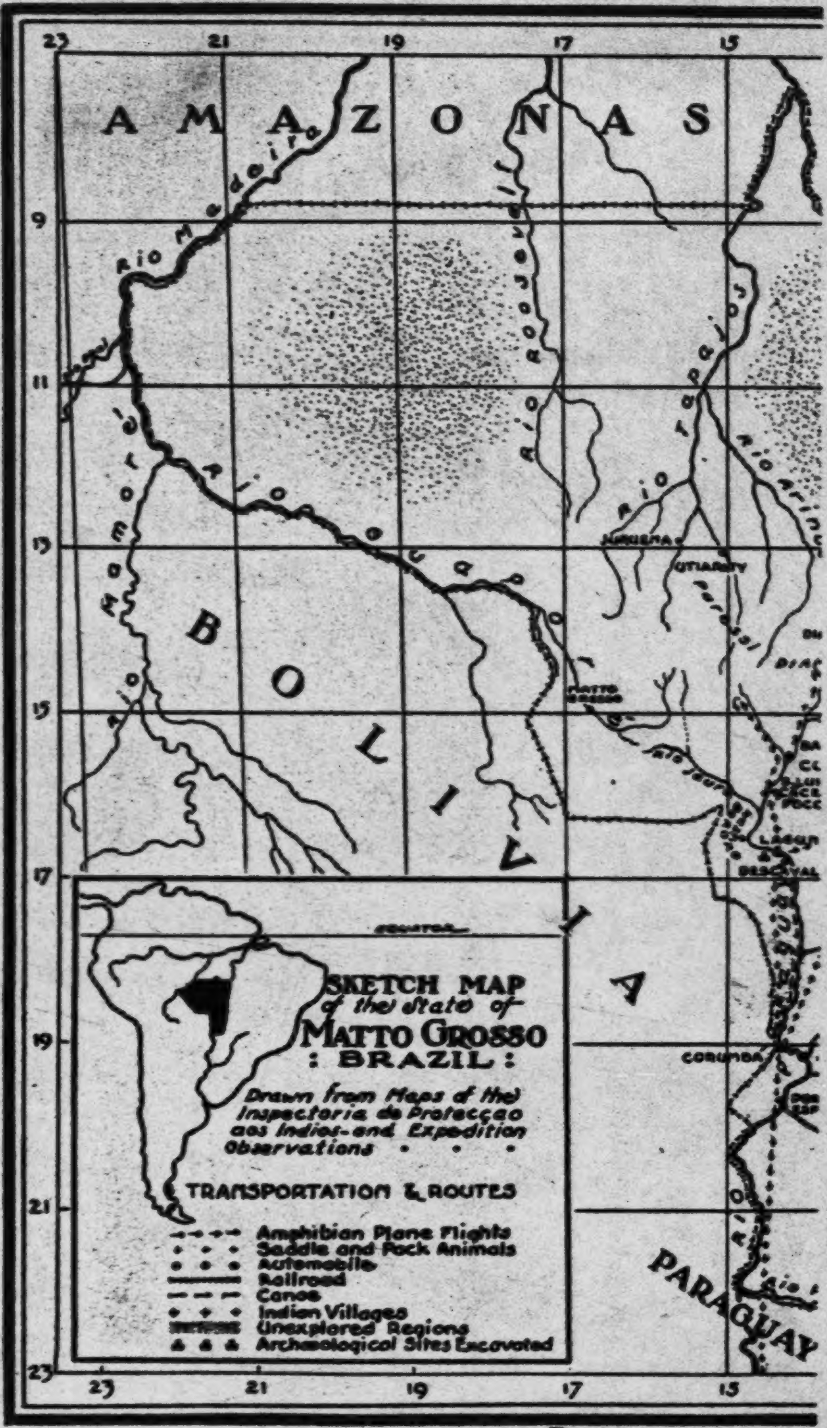
B
[283]

W
[501]
[412]

[p. 179]
[p. 180 is blank] [for captions, see art. 116, p. 89.]

Bacairi SP7

Ba
Bo
102
131
133
172
487
361


AMAZONAS
Rio Madeira
Rio Roosevelt
Rio Tapajos
Rio Arinos
Rio Mamoré
Rio Guaporé
BOLIVIA
Juruena
Utiariti
Matto Grosso
Rio Jaurú
Descalvado
Corumba
PARAGUAY
Rio
Equator
23
21
19
17
15
9
11
13
15
17
19
21
23
SKETCH MAP
of the State of
MATTO GROSSO
: BRAZIL :
Drawn from Maps of the Inspectoria de Protecçao aos Indios and Expedition Observations
TRANSPORTATION & ROUTES
Amphibian Plane Flights
Saddle and Pack Animals
Automobile
Railroad
Canoe
Indian Villages
Unexplored Regions
Archaeological Sites Excavated

[Facing P. 180-A]

[Plate XXV-A]

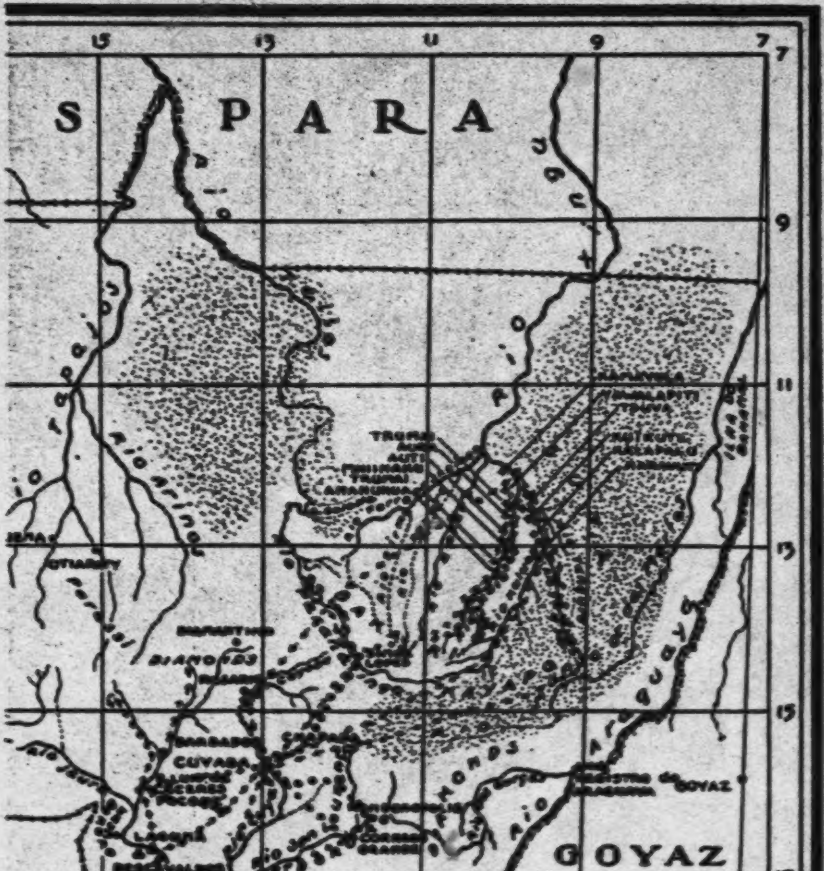
3:Petrullo E-5 (1931)1932

SP8 Bororo SP8

Bacairi SP7

PLATE XXV

Ba
Bo
102
131.
133
172
361
487


PARA
GOYAZ
SAO PAOLO
PARAGUAY
Rio Arinos
Rio Araguaya
Rio Paraguay
Rio Pequiry
Rio Taquary
Rio Negro
Rio Parana
Rio Apa
TRUMAI
AUTI
DIAMANTINO
CUYABA
CORUMBA
PORTO ESPERANÇA
CAMPO GRANDE
REGISTRO do GOYAZ
S. RITA do ARAGUAYA
15
13
11
9
7
17
19
21
23
West from Rio de Janeiro →

[Plate XXV-B] [Facing P. 180-B]